Curry Stephenson Malott

Critical Pedagogy and Cognition

An Introduction to a Postformal Educational Psychology

Springer

Critical Pedagogy and Cognition

EXPLORATIONS OF EDUCATIONAL PURPOSE

Volume 15

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Educational Psychology

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*For Joe L. Kincheloe and his many,
generous, critical, postformal gifts*

Preface

This book, presented in an introductory, yet sophisticated and appropriately academic, format, simultaneously contributes to the fields of critical pedagogy and educational psychology in new and innovative ways by demonstrating how critical pedagogy, postformal psychology, and Enlightenment science, seemingly separate and distinct disciplines, are really part of the same larger, contextualized, complex whole from the inner most relatively developmentally fixed biological context of human faculties to the perpetually shifting, socially and politically constructed context of individual schema and human civilization. The text's uniqueness stems from its bold attempt to connect the postformal critical constructivist/pedagogy work of Joe Kincheloe and others to Western science based on a shared, although previously misunderstood, critique and rejection of crude forms of social control, which the psychologists call *behaviorism* and Western scientists identify as *mechanical philosophy*. This book therefore argues that critical pedagogy, which includes, among others, anarchist, Marxist, feminist, Indigenous (globally conceived), Afro-Caribbean/American, and postmodern traditions, and critical/constructivist educational psychology have much to gain by engaging previously rejected work in critical solidarity—that is, without compromising one's values or democratic commitments. Joe Kincheloe argued that this interdisciplinary approach allows the postformal researcher/activist/educator (i.e., the bricoleur) to listen to and engage subjugated knowledges and, in the process, become more critically democratic and complex. The goal of this book is therefore to contribute to this vision of developing a more transgressive and transformational educational psychology. Through these discussions and explorations the historical and philosophical development of the field of educational psychology is outlined for the novice, yet with enough unique insight to engage the seasoned scholar.

Contents

Chapter 1
Introduction

Critical Pedagogy and Cognition: An Introduction to a Postformal Educational Psychology is an introductory textbook laying out a new paradigmatic approach to the study of cognition and the implications of this perspective for educational psychology. Educational psychology has traditionally addressed issues such as teaching, learning, motivation, cognitive development, personal, social, moral, and emotional development, learning abilities and learning problems, thinking processes, intelligence, classroom management, higher order thinking, assessment, lesson planning, self-esteem/self-concept, creativity, study skills, tests, and measurements. Over the last couple of decades profound changes have occurred in higher education and knowledge production that hold dramatic implications for educational psychology. While many psychological scholars involved with situated cognition, linguistics, socio-cognitive analysis, constructivism, enactivism, and integrated intelligence (i.e., Buddhist psychology), to name just a few, have challenged cognitive science and educational psychology's conceptual landscape, other work is emerging that promises to exert similar effects on the field. This textbook proposes to study the traditional concerns in the field in light of these new (and old) *ways of seeing*. It will serve as a reconceptualized introduction to the field in the twenty-first century.

In some ways the book will serve as an interdisciplinary study of the biological, social, and spiritual aspects of cognition and educational psychology. Before we continue we must note that the *spiritual* domain, from a scientific perspective, refers to the notion of *free will*, our most *noble gift* according to Galileo, which, for Newton, was evidence of *action at a distance* therefore disproving mechanical philosophy. However, Newton had no scientific explanation for *free will*, that is, the *absurd* notion of being animated by an independent (not divine), non-material, perhaps spiritual, entity. Three hundred years later science still cannot explain the idea of mind, free will, or the phenomenon of consciousness beyond the idea that it is just matter organized in such a way as to produce thought. Traditional psychology, through behaviorism, has attempted to solve the problem by denying the problem arguing that *free will is an illusion because humans are designed like machines that only respond according to external conditioning*. That is, humans, according to the behaviorists, are not *designed* to be *free*. However, this explanation is inadequate at

best, and dangerous at worst, because we know that humans suffer when our creative capacities are externally controlled as wage workers, for example, rendering the concept of extreme importance for teaching and learning.

Situated cognition and socio-cultural analysis in this context can be viewed as what happens when educational psychology, cognitive science, and notions of free will intersect with cultural anthropology, sociology, social theory, philosophy, psychoanalysis, literary studies, and critical pedagogy. *Critical Pedagogy and Cognition: An Introduction to a Postformal Educational Psychology* picks up on this intersection as it considers new ways of viewing and representing the field. As the study of learners, learning, thinking, and teaching, educational psychology has traditionally viewed these topics outside of psycho-social, spiritual, and cultural processes. In the traditional paradigm the field focused on the processes by which information, skills, values, and attitudes were transmitted from teachers to students mechanistically where the individual learner is not physically contextualized or endowed with an independent *free will* or spirit. Dedicated to both scholarly advances and practical applications, the book opens a conversation about these issues from unique and compelling perspectives. Dedicated to multiple ways of conceptualizing the field, I discuss and question the assumptions on which the existing field is grounded.

With these ideas in mind the book engages the various sub-disciplines that come under the umbrella of educational psychology: developmentalism, evolutionary biology, the nature of mind, child and adolescent psychology, learning theory, cognitive science, abnormal psychology, teaching and learning, motivation, intelligence and psychometrics, and social psychology. Some chapters will focus on knowledge production and research in these domains and accepted processes of interpretation and meaning making. Other sections of the book will analyze assumptions about the autonomous individual and nature of mind. Are the boundaries that the field has traditionally established to demarcate what is inside and what is outside of the mind in need of reconceptualization? Do students "take in" information from "outside" themselves in the learning process? Have artificial borders been constructed between self and other? Individual and community? Cognition and emotion?

An example of the type of disciplinary ferment addressed by the book involves the conversation over the social formation of the learner. In this context authors will explore the socio-cognitive assertion that social interaction is a fundamental aspect of the human self. In this conversation many contemporary psychoanalysts have maintained that the self is never complete, always in process of shaping and being shaped by the socio-cultural and symbolic realms. With these ideas in mind these psychoanalysts replace the term "self" with its implication of autonomy and unity with the term "subject" with its connotation of the self's production by its interaction with the world around it. Thus, the argument is made that the development of mental functions must take into account a wide variety of factors including contextual analysis, the conscious and unconscious production of identity (subjectivity), the subtle dynamics of interpersonal interaction, and an individual's or a group's position in the cultural web of reality.

Such psychoanalytical speculation brings us back to the analysis of educational psychology's assumptions about the concept of mind. Psychoanalytical analysis and Buddhist psychology, among other sub-disciplines, challenge the traditional notion that mind does not exist beyond the body. Buddhist psychologists even challenge the Western tendency to reduce the notion of mind to a single lifetime arguing that one's spirit or free will develops over many lifetimes giving way to the possibility of a critical, complex, historically grounded psychology. When educational psychologists fail to challenge these traditional views of mind, scholars of Buddhist psychology, socio-cognitivists, and contemporary psychoanalysts (among others) assert that undesirable consequences result.

From this perspective, intelligence, memory, and thinking are not merely the possessions of individuals—they are always social and historical processes. Viewed in this context psychometrics, for example, is opened to new questions; for example, just what is being measured on an I.Q. or a standardized test? Some scholars from the socio-cognitivist paradigm would argue that the examinations measure more of the student's cultural familiarity with the discourse of Western schooling and linguistic socialization and less some objective notion of innate intelligence. In this context—as well as with most other aspects of the book—questions of power are brought into the conceptual mix. This is why critical pedagogy is so central to the conceptualization of the work. Whose interests are served by particular answers to the preceding questions and to the way educational psychology is configured in general? This critical pedagogical concern with justice and power permeates all aspects of the book.

In this critical context debate has emerged in the field concerning the social structuring of the self. While more traditional psychometricians, for example, argue that it is impossible to measure such a process, socio-cognitivists argue that problems result when the social dimension is ignored. Such problems, they continue, affect most directly those in less powerful, marginalized social positions. Outside such contextualization individuals from dominant cultural backgrounds are unable to understand that the behaviors of socio-economic subordinates may reflect the structural pressures under which they operate. Thus, a political dimension is added to the conversation within educational psychology. More traditional educational psychologists often believe that socio-economic success is the result of individual merit and intelligence hierarchies and bell curves represent the natural dispersion of biological cognitive aptitude. Socio-cognitivists disagree, arguing that such individualized belief structures serve to hide the benefits bestowed by dominant group membership.

Thus, an important discussion emerges in educational psychology around the following question: Is the individual the object of study in the field or must individuals always be analyzed in a larger social context? Also, rejecting the false science of invented intelligence hierarchies, how can biological knowledge inform and advance this socio-cognitive work for social justice? Socio-cognitivists and many cultural educational psychologists refer to the individual orientation of many in the field as "concealment by individualization." They use this phrase to mean that the effects of race, class, and gender discrimination are hidden by reducing cognitive and educational study to the individual level. In this context such educational psychologists

challenge the universal hierarchies about human development that emerge from what they refer to as "decontextualized studies." In response to the socio-cognitivists mainstream educational psychologists argue that to achieve empirical validity the mind must be studied in laboratory settings where it can be viewed in detailed specificity. In this context it can be conceptualized as the "software program" that is best understood in social isolation. Such isolation, mainstream psychologists contend, avoids the messiness of the social values and political agendas researchers concerned with contextualization inevitably bring to studies of cognition, teaching, learning, and development.

These conversations and debates construct the conceptual core of *Critical Pedagogy and Cognition: An Introduction to a Postformal Educational Psychology*. In addition to delineating the various concerns and subfields of educational psychology, descriptions of these intra-disciplinary debates will run throughout the various chapters. Such material will produce a detailed description and interpretation of the field as it stands in the first decade of the twenty-first century. Subsequent chapters will indicate how paradigms collide and the ways such collisions shape how teachers, policymakers, school leaders, and the public view education. From the perspective of many in the "critical new paradigm" of educational psychology, the empirical decontextualization processes tend to *psychologize* the field. In this new paradigmatic analysis psychologists blunder when they study cognition, teaching, learning, motivation, human development, identify formation, etc., as only psychological processes—not as psychological *and* sociological, political, economic, cultural, linguistic, and other processes as well. Jean Piaget, they argue for example, decontextualized his study of children, often removing questions of cultural context from his observations and analyses. Did non-European cultures, they ask, develop in the same way? What about in other historical periods? Socio-cognitivists and cultural psychologists ask: What does it say about not only Piaget, but also educational/developmental psychology in general, that such questions were not asked?

Thus, the fascinating debate rages in the domain of educational psychology. *Critical Pedagogy and Cognition: An Introduction to a Postformal Educational Psychology* is an important book at this historical juncture because the issues it addresses matter so deeply. The topics it explores rest at the basis of how we define ourselves and the world around us. Within these concerns rest the future of education. Because of its centrality to these issues readers interested in educational psychology as well as pedagogy, teacher education, history, philosophy, anthropology, cultural studies, sociology, and other areas will find the text germane to their needs. The book will introduce readers to a complex set of ideas around issues of critical pedagogy, cognition, and educational psychology. Thus, it will be written in an accessible style with definitions of unfamiliar terms provided for the novice reader.

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Joe L. Kincheloe
Curry S. Malott

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Part I
Psychological and Critical Foundations

Chapter 2
Paradigms and Knowledge: Understanding the Field of Cognitive Studies and Educational Psychology

As we engage the field of *educational psychology* our primary concern is *understanding* the historical development of the *paradigms* and *knowledge* that constitute the substance of its internal content. Situating these ideas in a social, historical context will assist the reader in comprehending the complex, dialectical nature of theory and practice and the ways the larger social forces of competing class interests always inform the knowledge production process, in both complex and contradictory ways. In other words, as we engage the cultural, power-infused world of education as professors, classroom teachers, students, parents, and educational leaders, it is important that we are aware of the theory informing our practice and the ways they are mediated by our own cultures and the larger societies we are contextualized in (Malott, 2008; Malott, 2010a; Malott, Waukau, & Waukau-Villagomez, 2009).

At the heart of all educational experiences are ideas (both stated and unstated) about human nature and intelligence—in short, *educational psychology*. That is, all instruction and leadership structures, for example, are created based on ideas, stated or unstated, about intelligence and who has it. Most educational decisions are based on the assumption that intelligence is measurable and that it is unevenly distributed throughout the population. Because the dominant educational psychology perspective tends to be presented as a non-perspective, or *just the way it is*, and because the dominant perspective *is* the dominant perspective in most schools and colleges of education, far too many educational workers engage their practice unaware of the psychological presuppositions informing their approach. Consequently, through our work, we far too often serve political and economic interests without having had fully reflected on the consequences largely because we are not encouraged to develop this active and empowered political awareness (Malott et al., 2009).

What follows is an attempt to situate these and other tendencies within contemporary institutions of education in a larger historical context. The purpose of this engagement is to demonstrate that since the emergence of educational psychology, education has tended to ignore the norms and values of the scientific community, such as honesty, in favor of the political and thus biased motivation of social control and the regulation of consciousness embedded within mechanical behaviorism, needed to maintain the basic structures of power, while simultaneously claiming

to be grounded in scientific and, consequently, objective methodology. Essentially what I am attempting to contribute to are the arguments *for* an educational psychology conducive to the curricular and pedagogical reforms initiated and constructed democratically by teachers, students, parents, and other cultural workers as the practice of freedom and the demonstration that high levels of intelligence and critical thinking are not rare exceptionalities, as mainstream psychometrics maintains, but are rather indicative of the human condition.

Before we take the epistemological plunge into this study, let us pause for a brief moment and summarize the sections below. The first section highlights the influences that gave way to the emergence of psychology itself, a product of Western philosophy and thought. Examining the roots of modern psychology we find that it was the product of the Western-elite *recovery movement* after the influence of Western-trained intellectuals by the Islamic Moors and the democratic example of many Native American groups, such as The Haudenosaunee of Western New York, eventually influencing the American Revolution, The Enlightenment, Romanticism, and critical theory (Malott et al., 2009).

However, as we will see below, the romantic conception of the world, which, it can be argued, has been beneficial, from a pro-democratic and social equality perspective, has had a tendency to *fetishize* the oppressed as *noble*, but deterministically stuck as *the poor, unchanging, forever victims of the brutes of commerce*, or until exterminated (Malott, 2008). While Romanticism and the democratic movements it has inspired around the world have realized many important victories against the hierarchies of antiquity and the contemporary abuses of a world so constructed, its influence, as suggested above, has not been uniform or without perversions. Romanticism, nevertheless, resulted in a paradigm shift away from the materialist mechanical philosophy in favor of the less-controllable and non-material ontology of *free will*.

While the notion of *free will*, which Isaac Newton described as *action at a distance*, remains in tact as a largely unknowable entity, romantics have distorted it by situating it within a socially constructed hierarchy of civilizations paradigm. Within this construction so-called primitives' (i.e., Indigenous people around the world) are assumed to have maintained a connection to free will or freedom that is less polluted than the civilized citizen of modern industrial capitalism. The romantic plea might be effective for mobilization, but, ultimately, it has proven far too destructive, simplistic, paternalistic, and dehumanizing. As we will see below, Jung critiqued Rousseau's romanticism for its historical inaccuracy and its *primitive-izing* impulse. However, like most other Western, counter-hegemonic scholars and revolutionaries, Jung too was unable to completely break from the hegemonic trappings of his European world evidenced by his internal conflict between the great contributions and insights he observed through his limited interactions with Indigenous communities and his belief that these people were *primitives* (Deloria, 2009).

Again, as demonstrated below, the hegemonic creation of psychology as a political tool can be understood as a pseudoscientific, social, political, construction

designed to restore the mechanical ontology that views the world, including the human mind and its causes and functions, as fully knowable, predictable, and thus, with the proper knowledge and classroom management strategies, able to be externally commanded according to the will *not* of the student, but of the teacher, administrator, or federal policy maker. Again, the problems psychology has claimed to have solved are not new, but, through the creation of a discipline, were *newly* politicized in the service of domination and social control. The goal of psychology here has been to reproduce the basic structures of power within the hierarchically constructed project of colonialism and now neoliberal capitalism through the manipulation and control of the mind or consciousness/worldview.

After this historical contextualization that includes not only behaviorism, but mentalism as well, the contemporary context is outlined highlighting the ways the mechanical approach to educational psychology has been re-instituted with more force and vigor than ever witnessed before despite the constructivist revolution that slowly began to develop during the first half of the twentieth century, which has since developed into a vast and influential movement and approach to teaching and learning. The power and influence of the mechanical paradigm despite a vast and compelling body of literature against it, can be explained, in large part, by the neoliberal form of global capital that has transferred wealth and thus social power to an elite capitalist class more powerful and concentrated than any other super power the world has ever seen from ancient Egypt, the Romans, Great Britain, to the USSR. This surge in conservative power and thus the distribution of the mechanical philosophy has, again, inspired a long tradition of counter-hegemonic movement that traces its origins to indigeneity, The Enlightenment, Marx, the Frankfurt School, constructivism, and many other sources.

The final sections therefore highlight the challenges posed to mainstream psychology. We begin this section by looking back to the time period between the 1920s and 1950s, to Piaget, to Vygotsky, and the emergence of Chomsky, because, in their own ways, they posed the first major psychological challenges in the contemporary era to the mechanistic hegemony that had dominated mentalist and behaviorist approaches to psychology and the study of human nature. We then examine the ways in which critical constructivism, critical pedagogy, and postformalism have extended Vygotsky, Piaget, and Chomsky's critiques. The chapter concludes with reflections on the future of a postformal, critical psychology and the ways it can be advanced by Buddhist psychology and other spiritual traditions that contribute to our understanding of free will/the soul/consciousness. The purpose of these investigations is to develop a psychology conducive to resisting the irresponsible and destructive nature of neoliberal, global, capitalism. In other words, in order to pose a real challenge to capitalist hegemony, we must more fully understand ourselves and the nature of our human agency, and if ancient spiritual traditions can offer any assistance in this struggle, then we should attempt to be as disinterested and objective as possible to limit the rigidity fostered by preexisting worldviews/ideologies/socially constructed schema.

From Ancient Greece to Ancient Egypt: Introducing the Evolving *Western* Concept of Mind

As far back as oral and written histories allow us to travel, we find evidence of rigorous examinations and inquiries into the nature and causes of *thought* and *thinking* from ancient Black Egypt to Native North America—two primary influences of contemporary Western discourse and practice. For example, there is much evidence pointing to the cultural diffusion that brought the Egyptian-grown knowledge, philosophy, and form of social organization indicative of the modern empire to ancient Greece and, consequently, paving the way for the eventual Roman Empire (see Malott et al., 2009, for a summary of this literature).

Along with the methods of unification, or unifying vast tracts of land encompassing a great diversity of peoples and languages, through a system of universal hierarchy marked by such characteristics as the institutionalization of one government, one currency, and one dominant commerce language, leading Greek intellectuals of antiquity to adopt many ideas about the nature of existence and what it means *to be* from the elite scholars and scientists of Black Egypt. For example, for many scholars the politico-philosophical brilliance of ancient Egypt was their "pantheism," which challenged the notion of humans as vessels of God and therefore guided by divine intervention by "implying an animate universe without need for a regulator or even a creator" (Bernal, 1987, p. 27). The significant word here for our discussion of mind is *animate*, which suggests an ontology where life forms have an independent and free existence that, unlike before in Western thought, have *choice*, that is, *minds of their own*.

Again, before Aristotle (and Plato) the notion of *mind* as an independent entity did not exist in ancient Greece. In the poems of Homer, written in the eighth century BC, the characters have no *free will*, they perform no mental actions such as thinking, believing, or feeling. Everything they do is the result of being *commanded by God* or directed by *inner voices*. For Aristotle and Plato, however, just as the human form comes equipped with arms and legs to execute physical actions, it also comes with a place to store thoughts and memories and calculate mental functions. This concept of cognition would eventually be known in the Western world as self, ego, psyche, and, today, *mind*.

Signifying this shift in paradigm throughout *The Republic*, Plato (2001) extensively comments on human desires as independent phenomena and not necessarily guided by voices. Reflecting on the "necessity" of the "soul" or *the mind*, in one such example, Plato (2001) acknowledges human's capacity for "thought and self-control" (p. 271), a revolutionary statement given the context in which it was written. However, Plato's *soul* was not without its own hegemonic trappings. That is, while Plato conceived the mind or soul as independent, he did not suggest all minds were created equal. The most obvious example is his hierarchy of metals metaphor where the few elite gold metal people were the natural rulers and decision makers; silver metal folks were the natural middle managers; and the vast majority were brass metal quality, the lowest grade, considered nothing more than brutes and

slaves capable only of receiving the most simplest directions in need of constant supervision and external discipline (Malott, 2008).

Aristotle, to be sure, "studied at the Academy under Eudoxos of Knidos, the great mathematician and astronomer who is reported to have spent sixteen months in Egypt shaving his head in order to study with priests there" (Bernal, 1987, p. 108). Praising early Egyptians for their ingenuity and brilliance Aristotle (1992) in his *The Politics*, written around 300, comments that "the Egyptians are reputed to be the most ancient people, and they have always had laws and a constitutional system. Thus we ought to make full use of what has already been discovered, while endeavoring to find what has not" (419). It is this enduring spirit of recognition and advancement, democratically conceived, that informs this book and approach to Kincheloe's postformalism—a unique and largely unrecognized approach to educational psychology itself.

However, after the fall of the Roman Empire the knowledge of antiquity would all but disappear from the Western world, with the exception of a few monasteries and Churches, especially those further south in Spain and throughout the Iberian Peninsula. During this time Europe would slip into barbarism—the *Dark Ages*—as much as the rest of the world thrived in the arts, the sciences, culture, philosophy, and politics. It would take both the Islamic Moors conquering and occupying Spain between 700 and 1492 and many of the European colonizers of the Americas to be democratically transformed by the example of Native Americans civilizations and peoples, for Europe to begin emerging from its time of depravity, a process far from complete (Malott et al., 2009).

This is highly significant because the current dominant perspective in the Western world, including the United States and Canadian societies, is based on the false assumptions that Western civilization is an exclusively *white* construction and that it represents the most advanced form of human sociability in the form of industrial capitalism. Not only is this historically inaccurate, but it is also qualitatively wrong. That is, to suggest that industrial capitalism is the best we can do as a species presents a grim view of our potentiality especially given the current crimes against all life in the Gulf of Mexico and elsewhere by one of the world's largest and most powerful corporations, British Petroleum.

However, getting back to our historical discussion, as we observe below, the enlightenment of the *European mind* and Western civilization would run into serious opposition from its own internal ruling elite as their power and influence surged with the advent of the industrial revolution and its unprecedented wealth-generating capacities. Because the one-dimensional, deterministic, mechanical approach to ontology, and the external control it suggests, is far more conducive to an unequal and exploitative social order than ideas of free will and consciousness *and* the notions of freedom and dignity they engender, the Western struggle for an *Enlightened mind* and becoming part of humanity's quest for an egalitarian world have been pushed further and further back into Greek antiquity. Again, the purpose of this book is to offer another challenge against the oppressive tendencies of a Western ruling-class psychology by actively engaging the democratic impulse

of Kincheloe's postformalism, which translates into an attempt to go beyond mere regurgitation and enter the not so humble terrain of contributions.

The Emergence of Western Science: *Reason* as Revolution Against Divine-Right Tyranny

While the authority of Western science has been drawn upon to commit every conceivable crime against humanity and has therefore tended to be rejected by critical theorists and pedagogues, including Kincheloe and his postformalism, it began as an attempt to establish high standards of rigor and evidence to undermine the bias of Europe's highly oppressive divine-right ruling class.

Professor Ron Good (2005), 40-year veteran of science education, summarizing the foundations of modern science, notes "questioning authority . . . was a necessary condition for modern science to take hold and make progress in seventeenth century Europe" (p. ix). It is widely accepted in Western science education that it was Copernicus who was the first to propose a theory that replaced the Earth with the Sun as the center of the universe, "thereby demoting" the world of humans "to a far less exalted place in the whole scheme of things" (Good, 2005, p. 1), and in turn, challenging Christian doctrine.

Standing on the conceptual groundwork laid by Copernicus, it is said that Galileo Galilei found the strength to "question religious dogma" through the advancement of the mechanical philosophy of the universe that, rather than directed by God, is a series of interconnected machines. Galileo was persecuted for these ideas in 1633 by the Inquisition in Rome and sentenced to house arrest for life. Galileo, who lived in southern Europe almost 100 years after Columbus began colonizing the Americas, and in the process, committing the most horrendous acts of genocide in the name of Christianity, can be said to have been part of that very early scientific revolution, the Renaissance, which played an influential role in the radical Enlightenment that refused to accommodate, with varying levels of success, the religious ruling-class hierarchies of antiquity.

Galileo's *new science*, which, again, challenged theological dogma, accurately tends to be attributed not only to those who came before him, such as Copernicus, but also to the Thirty Years War that "devastated" and "brutalized" vast tracts of Germany and Bohemia between 1618 and 1648 (Israel, 2006, p. 63). This war cost much of Europe, including Spain and Italy, an "unprecedented" amount of money and human life, and in the process, left unresolved the religious crisis between Protestantism and Catholicism (Israel, 2006, p. 63). While this analysis is important, it only tells part of the story. That is, it speaks to what Galileo (and Descartes) was against—ruling-class religious dogmatism—but it does not address the source of what he was *for*, which can be summarized as "freedom of thought, and independence of the individual conscience" (Israel, 2006, p. 64).

According to Galileo biographer and translator, Stillman Drake (1957), Galileo's dedication to freedom of thought manifested itself in his emerging humanism that translated into his refusal "to write in Latin" because "the readers he cultivated . . .

lived outside the universities" (p. 2). In other words, Galileo was democratically interested in making knowledge available to the commoner. This imperative clearly broke with the hierarchy of religious idealism that views knowledge as emanating from within the mind based on the will of God. Highlighting this point Galileo Galilei (1610/1959) notes that "the nature of the human mind is such that unless it is stimulated by images of things acting upon it from without, all remembrances of them passes easily away" (p. 23). For the time and place, this was a radical statement challenging the social foundations of the monarchy. Equally impressive, Galileo made this observation in a letter to the Grand Duke of Tuscany seeking approval for his sun-centered ontology.

At the heart of Galileo, and Europe's Age of Enlightenment more generally, is the notion that science is "the greatest revolutionizing force" because it represents the most objective, clearest form of "rational thinking" and therefore the best suited to undermine the clerical bias and prejudice of the Inquisition (Hankins, 1985, p. 2)—again, the church and monarchies representing Europe's ruling classes of that time. The scientific model of reason was particularly adept at providing a way to overcome the obscurity and "outlandish hypotheses" of the mechanical philosophy by studying "the vital phenomena themselves and attempt to reduce them to rule, without any suppositions about original causes or imagined mechanisms" (Hankins, 1985, p. 115). Before we continue it is worth mentioning that this scientific quest for certainty, even if democratically conceived, is challenged by postformalism's critical constructivist epistemology that sees within the vast diversity of human experience the instability of meaning (Kincheloe, 2005).

Through reason it was argued that *analysis* would serve as the "proper scientific method" (Hankins, 1985, p. 20) leading the disinterested scientist to the discovery of the hidden truths of *objective reality*. Modern scientists therefore viewed *analysis* as representing the process through which "complex phenomena" could be reduced and synthesized into "simple components" (Hankins, 1985, p. 20). Through this process the biases of power and privilege could therefore be subverted through the knowledge production process. Again, the mechanical philosophy during the early Enlightenment was a challenge to ruling-class religiosity. However, as we observe below, the mechanical approach, too easily subverted by power as an ideology of social control, was replaced by a more liberating realization that the force acting upon the mind to act, while not external, is an internal and independent source that is perhaps forever unknowable.

From Descartes to Newton and Beyond: The Destruction of Mechanical Philosophy

Rather than being attributed to divine intervention "the concept of mind was framed in terms of what was called the 'mechanical philosophy'" that was based on the assumption that "the natural world is a complex machine that could in principle be constructed by a skilled artisan" (Chomsky, 2002, p. 49). French philosopher Rene Descartes is often credited with laying this conceptual foundation for the

modern Western interpretive framework, which, at the time, was highly subversive. Descartes' "mechanistic worldview" was profoundly influential changing "western civilization profoundly" as it was conceived as "something that changes everything" (Israel, 2006, p. 5) because it takes as its place of departure the possibility that everything that is believed to be true is actually false, therefore demanding sufficient evidence to prove the certainty of assumed truths.

Signifying his attempt to break with European hegemonic conceptions of mind represented in Plato's *myth of the metals* idealism, Descartes (1637/1994) describes his democratic conception of human intellectual endowments on page one of his *A Discourse on Method* noting that "good sense is, of all things among men, the most equally distributed," which is determined "by nature" (p. 3). Because "reason and sense" are equally distributed, reasons Descartes (1637/1994), they are "found complete in each individual" and therefore "the difference of greater and less holds only among the *accidents*, and not among the *forms* or *natures* of individuals of the same *species*" (p. 3). Considering this universal characteristic among the species Descartes (1637/1994) observes that "I rightly conclude that my essence consists only in my being a thinking thing [or a substance whose whole essence or nature is merely thinking]" (p. 122). From here it has been routinely argued within the Western modern scientific community that, unlike other species, humans do not operate solely at the level of instinct due to the unique ability to think before acting, and, as a result, possess the ability to change our minds or alter the schema that mediates how we understand and act upon the world.

However, Descartes (1937/1994) was also informed by dichotomous logic leading him to believe that "the mind or soul of man is entirely different from the body" (p. 128) even though "the whole mind seems to be united to the whole body" (p. 127). Upon closer investigation, however, Descartes (1637/1994) observes that when, "a foot, an arm, or any other part is cut off . . . nothing has been taken from [the] mind" leading him to believe that the mind and the body are separate and distinct—representing an inability to completely break from Western hegemony.

This mind–body dichotomy that Descartes is often critiqued for, according to Chomsky (2002), represents a logical attempt to demonstrate that there is something unique about the mind unexplainable through mechanical philosophy. Chomsky (2002) credits Newton with making the mind–body debate a moot point by demonstrating, to his own displeasure, that nothing in nature can be explained in mechanical terms. Newton achieved this through his "discovery of action at a distance," which Newton himself found to be "absurd" (Chomsky, 2002, p. 52) arguing that anyone who would accept it was not mentally fit, but was nevertheless forced to adopt it even though he had no means to explain it. That is, Chomsky (1988) notes

> Newton demonstrated that the motions of heavenly bodies could not be explained by the principles of Descartes' contact mechanics, so that the Cartesian concept of body must be abandoned. In the Newtonian framework there is a "force" that one body exerts on another, without contact between them, a kind of "action at a distance." Whatever this force may be, it does not fall within the Cartesian framework of contact mechanics . . . Newton himself found this conclusion unsatisfying. He sometimes referred to gravitational force as "occult." (p. 143)

The mind as a conscious, non-material entity could therefore not be explained by God *or* science and therefore remained (and has since) a great mystery. In other words, the brain might be matter designed to produce thought electrically, but the source of that animation remains clouded in mystery. Again, Newton would have preferred to endorse a physics that presupposes a mechanical universe that's separate and distinct parts operate not according to their own mysterious free will, but by their mechanical functions and the laws of mechanistic collusion. So distraught by his *absurd* discovery, Newton is said to have spent the remainder of his life attempting to disprove it (Chomsky, 2002). Perhaps this can partially explain why Newton drastically transformed his attitude toward ancient Egypt, which began to mirror the rise of European colonial dominance.

Situating this phenomenon in the larger political context of seventeenth century Europe, Bernal (1987) comments that in Newton's "early work he followed his Cambridge Neo-Platonist teachers in their respect for" Egypt, "but the last decades of his life were spent trying to diminish Egypt's importance by bringing down the date of its foundation just before the Trojan War" (p. 27) around 1200 BC. Bernal (1987) argues that Newton's change of heart was not only due to a growing European white supremacist hegemony, but it was also based on the threat ancient Egypt posed to the mechanical "conception of physical order and its theological and political counterparts—a divinity with regular habits and the Whig constitutional monarchy" (p. 27).

In other words, Newton was in favor of a universe that operates according to knowable and predictable laws, which he knew did not represent absolute certainty—standing in stark contrast to this was the random, chaotic, and independent nature of pantheism. Was Newton's belittling of ancient Egyptian accomplishments part of his attempt to save mechanical philosophy, as suggested above? The speculation is not unlikely, especially when we consider the larger context in which Newton was operating. Jonathan Israel (2002) situates the scientific community of Newton's age in an "atmosphere" marked by "constant threat of suppression emanating especially from the Church and the *parlements*" and his work, along with other English thinkers such as Locke and Bacon, was as follows:

> . . . Everywhere regarded, even among the most reactionary sections of the French Church, and by the Spanish and Portuguese Inquisition, as intellectually safe . . . innovative perhaps but entirely supportive of revealed religion, Providence, and the political and social order. (p. 516)

Highlighting his efforts not to offend Britain's Christian ruling elite with his natural science of motion that could be interpreted as displacing the hand of God, Newton (1952/1987) reassures his readers that "God suffers nothing from the motion of bodies" while, at the same time, "bodies find no resistance from the omnipresence of God" (p. 370). As a result, Newton (1952/1987) leaves intact the hegemonic notion that "the Supreme God exists necessarily; and by the same necessity he exists *always* and *everywhere*" (pp. 370–371) and, by implication, the ruling powers that claim to be the messengers of God's will. Perhaps shielded by the position of imperial superiority at that time of all things, British including hegemonic English thinkers, the

publishing of David Hume's *A Treatise of Human Nature* (1888/2003) was not met with controversy or much attention at all for that matter. However, over time, his work has proven to be foundationally influential. In his *Treatise*, Hume (1888/2003) recounts the implications of Newton's discovery noting that as a result, "the nature of mind" has become "obscure" and "uncertain" (p. 166) as it was and will forever remain. Making this point Hume (1888/2003) argues that "what is unknown, we must be contented to leave so" (p. 166). Hume (1888/2003) challenges the philosophers who claim that whatever exists can be known by suggesting that the answers to some questions lie beyond the capacities of human intellectual endowments. Consider his words:

> Certain philosophers . . . promise to diminish our ignorance; but I am afraid 'tis at the hazard of running us into contradictions, from which the subject is of itself exempted. These philosophers are the curious reasoners concerning the material or immaterial substances, in which they suppose our perceptions to inhere . . . This question we have found impossible to be answer'd with regard to matter and body: But besides that in the case of the mind, it labours under all the same difficulties, 'tis burthen'd with some additional ones, which are peculiar to that subject . . . What possibility then of answering that question, *Whether perceptions inhere in a material or immaterial substance*, when we do not so much as understand the meaning of the question? (pp. 166–167)

We might say that Darwin became one of Hume's "curious reasoners" although this time interested in the evolutionary history of the ever-elusive human mind, and, as a result, refused to let well enough alone, as it were. Drawing on the brilliance of seventeenth century European philosophers and beyond, Darwin described the human ability to associate an extra-ordinary amount of sounds with ideas, that is, language, as the species' most *marvelous invention*, which he hoped would be "incorporated within the theory of evolution" (Chomsky, 2002, p. 47). While Darwin's observations remain relatively uncontested, Chomsky has advanced this theory of language describing it not as an invention, but rather an innate system that is part of the genetic code. However, like those who came before him, Darwin did not have a scientific explanation for the mind. That is not to say that Darwin did not have powerful insights regarding the mind. For example, Darwin (2007) argued that it was through humanity's "powers of intellect" that "articulate language has been evolved" which our "wonderful advancement has mainly depended" (p. 84). Indeed, following Galileo and others, Darwin (2007) recognized language as humanity's greatest invention, which he contextualizes in the following passage:

> Language—that wonderful engine which affixes signs to all sorts of objects and qualities, and excites trains of thought which would never arise from the mere impression of the senses, or if they did arise could not be followed out. The higher intellectual powers of man, such as those of ratiocination, abstraction, self-consciousness, &c., probably follow from the continued improvement and exercise of the other mental faculties. (p. 403)

Following Kincheloe and others we remain highly skeptical of any hierarchies, even Darwin's universalized human-centric intellectual scale alluded to in the above quote. That said Darwin's conclusion that humanity's genetically determined intellectual endowments are responsible for our *success* as a species seems rather indisputable. Situated within this context of the creative and autonomous use of

language as an essential human characteristic, the assumptions within mechanical philosophy appear not only absurd but also highly offensive.

The Emergence of Psychology as a Discipline: Competing Hegemonies and the *Recovery* of Mechanical Philosophy

The hegemonization of science after *The Enlightenment* can be understood as a recovery movement to re-entrench the mechanical philosophy that would eventually affect all areas of academic investigation. In psychology the result was two initial competing schools or traditions—the *behaviorists* and the *mentalists*, both thoroughly deterministic in their conceptualizations of causation. In both cases human behavior was reduced to very simplistic functions. For mechanistic behaviorists, the human experience can be understood as an amalgam of responses to external conditions. Mentalists, or *biological reductionists*, on the other hand, downplayed the significance of environmental stimuli, and rather, focused on the role the internal design of the *person-as-machine* affected outcomes or behavior. However, the narrow and simplistic focus of the mentalists' objects of investigation, that is, simple sensations, ruling out more complex aspects of consciousness such as self-reflection, awareness of relationships, voluntary remembering, and deductive reasoning, because it was assumed that they were the product of distorted reasoning, these scholars reduced the concept of *brain* to its materialist, machine-like functions.

The invention of the first so-called credible *intelligence testing* in 1905 by Alfred Binet offered mechanical psychologists a way to quantify and measure what was assumed to be innate, predetermined cognitive ability thereby offering managers and leaders an *unbiased* method of sorting and ranking the population according to *ability* to meet the needs of an emerging industrial ruling capitalist class. However, Binet himself cautioned against the use of his instrument as a reliable measure of one's ability to learn over time (Cary, 2004). The urge for the managers of industry to quantify and sort human capital with maximum efficiency, however, proved far too great to resist.

Heritability of particular characteristics, such as intelligence, refers to the percentage of variation within "populations" being due to genetic factors, which assumes *intelligence* and *populations* are well-defined properties. The other half of the theory looks at "the percentage of variation in the characteristic due to all other factors." Considering intelligence, researchers examine "prenatal and perinatal biological factors, environmental factors of a biological nature such as nutrition, and social factors such as education and experience" (Nisbett, 2009, p. 22), as contributing to variability among particular populations. Again, intelligence and population characteristics, such as race, are falsely assumed to be well defined and thus measurable.

The debate between behaviorists and mentalists is therefore over what percent of intellectual variability is due to genetic factors and what percent is due to other factors. Neither *side*, if you will, questions intelligence as a knowable entity. They

both assume that it is well defined and therefore quantifiable. For environmental-ists/behaviorists like Nisbett (see below), the new culture racists or deficit theorists, intelligence testing only measures 20–40% of actual genetically determined cognitive ability. Nisbett concedes that what IQ testing is actually measuring is culture. However, for Nisbett (2009) this just reaffirms the Euro-centric notion that white culture produces more intelligent people, even after admitting that IQ testing is more of a measure of how white a person is than how smart or intelligent they are.

Before we explore the far-reaching influence of behaviorism, we examine the mentalist tradition pioneered by Wilhelm Wundt during the late 1800s. While the following discussion is roughly chronologically arranged, it is nevertheless interspersed with analysis situated in a more contemporary context highlighting the complexity of history as the dialectical development of ideas situated in geographical contexts and mediated by political/economic interests.

Mentalism and Wundt

In 1879 German physiologist and philosopher, Wilhelm Wundt, founded the world's first psychology laboratory at the University of Leipzig in Germany. Wundt was interested in constructing a methodology for uncovering the *natural laws* of the human mind, deterministically conceived, which he argued were primarily internal owing very little to external environmental conditions.

Wundt believed he was advancing a new science by bringing together the insights from physiology (external sensory) and psychology (internally determined) regarding the functioning of the brain/the mind. Physiology, for Wundt (1902), "is concerned with all those phenomena of life that present themselves to us in sense perception as bodily processes, and accordingly form part of that total environment which we name the external world" (p. 1). Psychology, according to Wundt (1902), represents a separate dimension, and therefore "seeks to give account of the inter-connection of the processes which are evinced by our own consciousness" (p. 1). In short, Wundt's (1902) *new science* was founded on a Cartesian reductionistic ontology that assumes the body and the mind are not one and the same, but are separate and distinct properties reducible through the rigors of scientific investigation.

However, while Wundt (1902) maintains his position that the separation between the mind and the body or the inner consciousness from the outer external world is necessary to solve *scientific problems*, one must remember that "the life of an organism is really one . . . We can, therefore, no more separate the processes of bodily life from conscious processes . . ." (p. 1). As a mentalist Wundt afforded particular attention to demonstrating "the presence of a consciousness" (p. 27). However, Wundt's conception of *consciousness* was a largely *mechanical* consciousness that cautioned against "metaphysical prejudice" (p. 27). That is, he rejected those who "regard every movement, even the falling of a stone, as a mental action," on the one hand, and at the other extreme, Wundt was equally dissatisfied with "Cartesian spiritu-alism" because it "recognizes no expression of mental life beyond the voluntary

movements of man" (p. 27). Summarizing his own conception of mind Wundt (1902) speculates

> When . . . we rule out all the movements that may possibly go on without the participation of consciousness, there remains but one class that bears upon it the constant and unmistakable sign of an expression of the mental life—the class of external voluntary actions. The subjective criterion of the external voluntary action, as directly given in introspection, is that it is preceded by feelings and ideas which we take to be the conditions of the movement. Hence a movement that we observe objectively may also be regarded as dependent on the will, if it points to similar mental processes as its conditions.

Wundt continues underscoring his reductive analysis noting that it is not always easy to distinguish between a "purely mechanical reflex" "due to external physical causes" and "a voluntary action" (p. 28). A similar clue that Wundt's approach to mind represents a sort of neo-mechanical philosophy is his rejection of higher psychological processes as valid foci for experimental psychology. By keeping his conception of the mind or consciousness to simply sensory perceptions such as sight and sound, Wundt's internal world of the brain remains machine-like and functionalist. His conception of mind/consciousness is also decontextualized. It is not situated in the living world of politics and suffering. It is not a mind that feels or thinks or struggles with the contradictions between capitalists and labor, it is rather a mind that is, at times, internal, and, at other times, responds to external stimuli.

Wundt's attempts to unify physiology and psychology therefore continued to follow a paradigm inconsistent with not only the real material world, but also the norms of the scientific community that had recognized the existence of a non-material, *mysterious* mind that has remained to the present day *non-quantifiable*. As noted above, Newton described this entity as *action at a distance*, which disproved mechanical philosophy because mechanical philosophy assumes that all that is real is material and measurable: if said property is not material, it is not real. What might explain Wundt's approach, which was at odds with science and out of touch with the turbulent times of the twentieth century, yet drew on the cultural capital of science for legitimacy? To begin answering this question let us examine the social, political, and economic landscape of Wundt's age.

During the late eighteenth century and the beginning of the nineteenth century in the Western world, including Europe and elsewhere, the dominant culture was characterized by, "art and literature and philosophy, and even politics" as being greatly "influenced . . . by . . . the romantic movement" (Russell, 1945, p. 675). Summarizing his understanding of romanticism *in practice* Russell (1945), a philosopher in his own right, paints a sort of operational definition when he notes, "the man of sensibility would be moved to tears by the sight of a single destitute peasant family, but would be cold to well-thought-out schemes for ameliorating the lot of peasants as a class. The poor were supposed to possess more virtue than the rich" (p. 676). The tendency to glorify and fetishize human suffering, or living in a *less-developed* or *less-advanced* state of being, according to the Euro-centric standards of Western industrialism, can be traced to Rousseau's *noble savage*, which is based on his romantically constructed knowledge of American Indians. Native

American leaders have in fact credited philosophers such as Rousseau for fostering a favorable, yet essentialized, attitude by Europeans toward Americas' vast Indigenous populations. In short, the romantic approach has been identified as the manifestation of a general "revolt against received ethical and aesthetic standards" (Russell, 1945, p. 675). Situating this Western paradigm shift from prudence to romanticism, Russell (1945) comments

> The period from 1660 to Rousseau is dominated by recollections of the wars of religion and the civil wars in France and England and Germany. Men were very conscious of the dangers of chaos, of the anarchic tendencies of all strong passions, of the importance of safety and the sacrifices necessary to achieve it. Prudence was regarded as the supreme virtue; intellect was valued as the most effective weapon against subversive fanatics; polished manners were praised as a barrier against barbarism. Newton's orderly cosmos, in which the planets unchangingly revolve around the sun in law-abiding orbits, became an imaginative symbol of good government. Restraint in the expression of passion was the chief aim of education . . . By the time of Rousseau, many people had grown tired of safety, and had begun to desire excitement. (p. 677)

However, while Romanticism offered many Europeans a more freer feeling consciousness and justification for more socially just policies than they were afforded in their pre-Native North American existence, even if it was unable to fully transgress the Euro-centric hierarchy of civilizations paradigm, the ruling elite quickly co-opted and further perverted the notion as they saw themselves as the paternalistic saviors or caretakers of their genetically inferior underlying populations—the labor power that created their exuberance and accumulated wealth. That is, the bosses began portraying themselves as the guardians of democracy and freedom, which they would paternalistically give to the poor and ignorant masses in exchange for their unconditional loyalty. Despite its' shortcomings and vulnerabilities, explored in greater detail below, Rousseau's romanticism supported a more liberated cognition than offered by mechanical functionalism in both its mentalist and behaviorist manifestations.

Wundts' *new* science can therefore be understood to be an elite response to the Western romantic view that influenced the imagery of the American Revolution, which equated Native American *Indians* with an embodiment of freedom and equality, and therefore the fully realized human essence, with *being* an *American*. Wundt's long drawn out details of the central nervous system regarding its physical appearance and function can be understood as an attempt to revive Newton's orderly cosmos, even after Newton himself discredited it. That is, Wundt's psychology painted a picture of a fully knowable, predictable, and thus, *controllable* human being with its orderly pathways and unchanging functions. Wundts' focus can therefore be understood as a diversion from what had long been known at the time of his writing, that is, that the underlying cause or force of human (and life more generally) consciousness and animation is a great mystery science, thus far, has proven unable to answer. For many reputable cognitive scientists, this is but one example of how the human mind, by design, is limited and not capable of answering certain types of questions. If the mind, and therefore intelligence, are entities science can tell us very little about, then assuming we can measure it objectively, is, at best,

naïve, and worst, a violation of the most basic norms of the scientific community such as disinterestedness and honesty (see Malott, 2010a).

By ignoring these, and other, scientific conclusions, Wundt's decontextualized approach to psychology has contributed to a similarly superficial model of education. The tendency to teach math and science as an exclusively mental activity unsullied by the politics and culture of the larger society, as tends to be the case in the Western world, owes its underlying assumptions, in part, to the mentalism of Wundt. For example, over the years it has become increasingly clear that just about any time a teacher education class in North America (especially the Anglo-dominated regions) assumes as its conceptual framework critical pedagogy and is therefore centered around the idea that because teaching and learning are always situated in socio-political contexts, the practice and implementation of a neutral education, of whatever subject matter, is an ontological impossibility, at least one student (but usually a group) will always parrot the dominant society belief that *politics and social issues should be left for the social studies because you don't want to pollute and water-down the fact-based objectivity of math and science—there is just too much to learn in the hard sciences to try to cover the soft stuff too*.

Most often guidelines for teacher preparation are defined by content area specialists and are often quickly seen only through the lens of content proficiency. This quickly gets transferred to classroom teachers who envision their role solely as an effort to increase student scores on state proficiency exams. In addition, states have created a static body of science standards that bound the accepted range of science content for each grade level. Standards represent how western science continues to conceptualize itself as a hierarchical categorization of nature. Standards further imply that there is actually a finite static body of previously discovered science truths to master and this depiction does not account for the contributions of those outside of the western science tradition (Brayboy & Castagno, 2008).

The acquisition and usage of scientific knowledge that is conceived of not as a highly political undertaking, but as a matter of *getting more of it* suggesting that the learner engage passively with the curriculum and to therefore *use* rather than *produce* science. Wolff-Michael Roth and Angela Calabrese Barton (2004) in their critically important *Rethinking Scientific Literacy* summarize the dominant perspective noting, "because every citizen should have some level of scientific literacy, so the argument goes, the implications of such individualistic takes on scientific literacy are finding ways in which the individual comes to know more of the facts . . . of science" (p. 49).

Similarly, the banking conceptualization of Western mathematics instruction, which tends to be based on the assumption that there is an objectively knowable reality out there awaiting discovery, and therefore external to the internal constructions of the mind, has been identified by critical educators as one of the primary culprits in perpetuating what has been coined as *number numbness* (Peterson, 2005). Bob Peterson (2005) alludes to what we can identify as pedagogical and curricular contributors to the widespread alienation engendered by mathematics. Looking at pedagogy Peterson (2005) identifies "rote calculations, drill and practice nauseum, endless reams of worksheets, and a fetish for 'the right answer'" as contributing to

"number numbness" (p. 10). Curricularly, math is so thoroughly segregated from all other subject areas, it "is basically irrelevant except for achieving success in future math classes, becoming a scientist or mathematician, or making commercial transactions" and therefore "not connected to social reality" (Peterson, 2005, p. 10). The ubiquitous existence of number numbness is all but total because the process of abstracting numbers from real entities in the concrete world represents the dominant method of traditional mathematics instruction—it is everywhere all the time, especially pronounced in working class schools following the common assumption of a natural hierarchy of intelligence.

Consequently, Wundt's work can be described as a form of *neo-idealist-realist, mechanical philosophy*. I invoke the philosophical tradition of idealism here because it is based on the assumption that knowledge production is an exclusively mental act that is distorted and perverted when it is influenced by the external material world through the unreliable and prejudicial senses. Idealism, in other words, suggests that true learning occurs in isolation from society when teachers are able to objectively deposit predetermined facts into the empty vessels of student minds. This mechanical act suggests that the notion of truth is objective and transcendent of culture, history, politics, and geography.

Wundt's work and influence on education is also associated with *realism* here because it is interested in discovering what realists, such as Aristotle, believed to be the universal, unchanging form of properties. Aristotle, therefore, concluded that because humans have the capacity to change their minds, have a consciousness or free will, which is part of our unchanging, that is fixed, biological design. As noted above, Wundt too affirmed the existence of a human consciousness, however, Wundt's free will is one that operates at a relatively low or superficial level. Another long-lasting feature of Aristotle's realism, perhaps the most appealing from a ruling elite vantage point, is his ontological perspective that understands the world to be constructed hierarchically from more developed, sophisticated, and intelligent, to less developed, sophisticated, and intelligent, both *between* given species and *within* separate and distinct specie.

The contributions of Wundt, and others, would eventually give way to contemporary educational psychology, and, as a result, what goes on in schools, which, as we observe below, has continued to draw on the language, and thus cultural capital, of science to affirm its institutionalized curricular and pedagogical decisions that rank and sort students according to the assumed measurement of a little known property—in a word, intelligence. However, far more influential than the mentalists in the institutionalization of dominant society psychology has been behaviorism. Because of the magnitude of behaviorisms' impact on educational psychology in the twentieth and twenty-first centuries, we devote considerable attention to its evolution and development situated in a society/historical context below.

Again, what we are arguing here is that the advent of psychology as a distinct discipline, since Wundt and beyond, has served as a vehicle to reintroduce the mechanical philosophy. Why? Because the worldview of mechanical philosophy is far more conducive to hierarchical social arrangements that rely on social control

to maintain basic structures of power than notions of *free will*. That is, the concept of *free will* is informed by an ontology of uncertainty and fluidity that conceives of the human condition as characterized by an internal force not absolutely determined by the external physical or spiritual world, but rather, dialectically related to them where the determinations flow in multiple directions, based, in large part, on the balance of power between the complex matrix of entities involved—from socially constructed human groups, diverse interconnected ecosystems and weather patterns, to other more *mysterious* spiritual entities. What we find below is that behaviorism, like mechanical philosophy in general, advances the notion of a flat, one-dimensional, predictable world by denying the existence of the mysterious life force or *free will* and by refusing to consider the interconnected and often contradictory roles power, coercion, political dominance, and geo-historical context play in behavioral outcomes.

Introducing Behaviorism: Basic Assumptions and the Contemporary Context

Internationally renowned professor emeritus of linguistics at the Massachusetts Institute of Technology (MIT), Noam Chomsky (1987), challenges the claim that behaviorism is founded upon scientific principles and is therefore a legitimate science. Chomsky (1987) argues that the behaviorist conceptualization of human malleability, which, again, assumes that free will is an illusion, is an outdated, pseudoscientific generalization of the nineteenth century. It is a *generalization* because it *is* true that people can be manipulated and trained to be obedient workers acting against their own class and human interests, but there are limits to human malleability not recognized within behaviorism. That is, the biological design of humans has endowed us with an innate propensity for self-reflection and thus self-awareness coupled with the need and natural ability to use and instantly understand language in forever new ways. Consequently, the behaviorist notion of the fully programmable or controllable human subject is not only ridiculous, but highly offensive and dehumanizing because it undermines the very essence of human existence as the act of freedom (see Chapter 7).

Similarly, the work of Karl Popper (1935/2007), first published in English in 1959, challenged the scientific community to rethink theories of knowledge. For example, Popper (1935/2007) challenged the claim that the scholarship and experiments conducted by psychologists qualified as science. Drawing on the scientific methods of inquiry to construct his argument, Popper (1935/2007) comments

> . . . The work of the scientist consists in putting forward and testing theories. The initial stage, the act of conceiving or inventing a theory, seems to me neither to call for logical analysis nor to be susceptible of it. The question how it happens that a new idea occurs to a man—whether it is a musical theme, a dramatic conflict, or a scientific theory—may be of great interest to empirical psychology; but it is irrelevant to the logical analysis of scientific knowledge. (p. 7)

Essentially, Popper (1935/2007) argues that observing individual behavior or the actions and choices of individuals does not meet the scientific requirements of justifying statements—that is, determining if they are testable and if they are "logically dependent on other statements" (p. 7). Mainstream psychology, for example, is based on the assumption that individuals are fully programmable, which is dependent on the statement, *humans have no free will* or *the idea of a free will and independent consciousness is an outdated myth of the seventeenth century*. Because science is not equipped to measure or observe the immaterial and because free will is an immaterial entity, science cannot disprove its existence. However, because people are socially controllable (to an extent), psychologists conclude that their *perceptual experiences* prove free will is an illusion. Popper (1935/2007) named this tendency psychologism, which he defined as "the doctrine that statements can be justified not only by statements but also by perceptual experience" (p. 75). As a Western-trained scientist Popper (1935/2007) reasons that "we do not attempt to justify basic statements" with "experiences" because they cannot be "justified by them" (pp. 87–88). Basic statements, such as free will exists but is unexplainable by science, "are accepted as the result of a decision or agreement; and to that extent they are conventions" (Popper, 1935/2007, p. 88).

Despite being founded upon debunked presuppositions, and thus disregarded by the scientific community, behaviorism has been realizing increasing attention as it moves into areas of the philosophical, psychological, and social foundations of education such as social cognition and organization, human nature and the nature of existence and reality. Founding figure of critical pedagogy, the late Brazilian Paulo Freire, developed an approach to teaching and learning that continues to disrupt the central underlying assumption behind behaviorism, that is, that we are only, and can only ever be, the product of our external conditioning.

Rather, Freire (2005), drawing on the work of Vygotsky, observed that we are in fact the product of what we inherent *and* what we acquire. What he was alluding to was that while people can be conditioned or indoctrinated through behaviorist pedagogy, we are not machines or computers, and therefore have the ability to become aware of our socially constructed schemas and alter them through *purposeful action* utilizing the intellectual gifts we are endowed with as a species. Again, assuming that humanity is *wholly malleable* therefore fails to acknowledge the omnipresence of our biological and spiritual endowments and, consequently, the existence of agency and resistance to oppression among even the most indoctrinated, uneducated (according to Euro-centric Western standards), and isolated communities.

This is an epistemological and ontological leap behaviorism is not willing to make because, as a discipline, it is based on the assumption that there is no internal reality hidden from science as Newton and others have suggested. For behaviorists, everything that is real is external, factual, observable, and fully knowable. The behavior patterns and decision making of humans, from this perspective, have nothing to do with a non-material, intelligent consciousness, but is the result of environmental conditioning. The goal of behaviorist research is therefore to understand teacher and student behavior patterns and how they are caused by environmental conditions thereby more efficiently designing strategies to obtain the desired

behavior or outcome. It is this managerial act of manipulation that is touted as scientific teaching. As a result, behaviorists claim to be uncovering the laws of behavior, and, as a result, believe they are able to devise universal strategies to universally control them.

As we will see in the pages that follow this conclusion is not the result of objective science, but is the West's arrogant attempt to control nature and harness its value-generating potential. Indigeneity has a lot to offer here. When people attempt to transform the balance inherent within natural ecosystems by clear-cutting forests, damning rivers, and polluting the world's bodies of water, for example, we do not make life better as we believe we are. What we do, on the other hand, is suffocate life, and because all life is connected, all life, including human life, suffers. While it is true that ecosystems are not static entities, and are therefore always in some stage of evolutionary development, the source of nature's progress is not solely external *or* internal, but is the product of the dynamic relationship between bodies and the contexts in which they are situated. Because of human intelligence and our unique ability to transform, disrupt, and destroy the natural balance of the world like no other species, we also have a unique responsibility not to abuse our powers—the combined force of our intellectual and spiritual (free will) nature. The current gross imbalances among people and between people and the rest of the world, is the product of a mechanical philosophy that is informed by a reductionism that separates values, politics, and culture from science and industrial society.

Behaviorism and US Education Policy: A Brief Contextualization

Such considerations are particularly significant in the United States as the country's first black President, Barack Obama, marketed and elected as the *change* and *hope* candidate offering a *real* alternative to *the status quo in Washington*, has been turned into a racialized caricature by the emerging corporate-funded, extreme right wing. Obama promised jobs and an alleviation to the growing poverty and hardships experienced by an increasing number of Americans—including millions of white people. Such promises have not been able to be delivered because the failing capitalist neoliberal system is continuing to fail and collapse and there is really nothing Obama can do about it—the problem is much bigger and older than any US president. Again, it is therefore inevitable that Obama would not be able to use a public institution to fix a failed privately controlled and deregulated capitalist system. This is not only because the government has little disciplinary control over large, global corporations, but it is due to the fact that Obama and politicians in general are dependent on corporate sponsorship to win elections.

It is therefore not surprising that when it came to education Obama's administration enacted policies exactly in line with what elite, corporate interests want. It is even less surprising that corporations want an even more behaviorist education focused less on academic knowledge and more on *character*—that is, manufacturing consent to the capitalist system. Charter School corporations, such as KIPP,

that operate in mostly poor, African-American, and Latino communities, therefore openly state that as much as 40% of classroom instruction is dedicated to teaching their students *the right way to interact and behave* (i.e., white, middle-class, and coddling and obedience to authority). This discourse and practice is remarkably reminiscent of the Indian boarding schools designed to *kill the Indian and save the man* as an act of cultural genocide and the creation of an obedient wage slave (Adams, 1995; Churchill, 2004; Malott, 2010a).

Again, to exert more control over what goes on in schools corporate America has been pushing for public education to be turned over to private interests. Bush did this with No Child Left Behind (NCLB) and setting schools up for failure. Obama therefore appointed Arne Duncan as his Secretary of Education who had become notorious for supporting Bush's behaviorist-oriented NCLB while CEO of Education in the incorporated city of Chicago. Currently, Obama and Duncan are appeasing corporate desires through the endorsement of Charter Schools, which cuts out the *setting schools up to fail* component, and more directly just hands schools over to *for-profits*. Summarizing what the ultra-behaviorist tendencies of NCLB have done to the practice of education at the level of teaching, George Wood (2004) notes that

> Teachers across the map complain that the joy is being drained from teaching as their work is reduced to passing out worksheets and drilling children as if they were in dog obedience school. Elementary "test prep" classroom methods involve teachers snapping their fingers at children to get responses, following scripted lessons where they simply recite prompts for students or have children read nonsense books, devoid of plot or meaning . . . good literature and meaningful stories are being banished from classrooms around the country. Who would have thought we would long for the days of Dick and Jane? At the high school level teachers race to cover mountains of content, hoping their charges will memorize the right terms for true/false or multiple choice exams . . . What this has meant for curriculum and the school day is that test preparation crowds out much else . . . (pp. 39–42)

Woods' use of the phrase "dog at obedience school" is a direct reference to one of behaviorisms' founding researchers, Ivan Pavlov (1849–1936), a Russian psychologist who developed conditioning experiments that highlighted the impact circumstances in the external environment have on bodily responses, thereby challenging the notion that the body is self-directed internally by an independent conscious or free will. Pavlov's account of behavior is therefore deterministic as suggested by the phrasing *conditioned reflex*. Summarizing his contribution to behavioral psychology Russell (1945) comments that Pavlov took the *association principle* advanced by Hartley in 1749, that underscores the relationship between ideas and language, and situated it in a physiological context. For example, Pavlov found that the simultaneous ringing of a bell and the feeding of a dog conditioned the beast to associate food with the sound of the bell. Consequently, after conditioning, when a bell is rung, the modified dog salivates signifying the physiological, and not purely mental, nature of *association*.

The exaggeration of the deterministic aspects of the association principle, as alluded to above by Woods, clearly informed the creation of NCLB leading to an obsession with attempting to control the actions or *behavior* of individual social

actors as demonstrated by the extreme scripted curriculum commonly employed with the most academically marginalized students, who tend to be poor, of color, and situated in those areas most excluded from the global economy where many people long for the opportunity to be included and have the opportunity to what amounts to being exploited for one's labor power as a wage worker.

Again, the pedagogical approach that is centered on teaching to the test is designed to manipulate environmental factors to coerce or condition students to behave in ways that they would not otherwise choose. In other words, people are not pre-conditioned to be internally motivated to memorize a series of unrelated facts or ideas, or to be externally controlled or commanded to perform other seemingly arbitrary tasks for the interests of others. Consequently, when the architects of education seek such objections, specific strategies must be employed to manipulate students to consent. However, despite the most effective No Child classroom management strategies, students and teachers continue to resist attempts to reduce their interactions to decontextualized conditioned responses. We therefore conclude that behaviorist pedagogy, as demanded by NCLB, presents an indoctrinating education that will always engender student and teacher resistance because *matter*, or bodies, are more than neutral machines and *motion*, or behavior, is more than benevolent external engineering.

As argued throughout this obsession to control stems from the belief that there are no non-material or non-measurable aspects of existence, such as free will or consciousness, leaving reality to consist of inanimate matter and motion powered by lifeless chemical reactions leaving the purpose of life as an uncritical adaptation to one's existing environment. To be a good worker, in the existing environment, means following directions and not questioning authority, which is at the heart of behaviorisms' conditioning.

With the meticulous study of observable facts the cleaver scientist is therefore able to uncover *the laws of behavior* paving the way for an effective pedagogy of behavior modification. Because this primitive model of behaviorism assumes that people have no free will or internal consciousness, the behavior of the masses is the result of external conditioning, the responsible men, the elite policy makers are therefore charged to manipulate the masses to ensure they have the best possible opportunity to reach their full potential. *Success*, in this context, is being valued by capital to serve *their* interests.

If NCLB represents an attack on democratic education from a pro-capitalist, behaviorist perspective, and the United States' current president/commander in chief was elected with promises of progressive tax reform and increasing social spending on healthcare and a less prescriptive education, then you would expect him to elect a Secretary of Education with a strong background in critical pedagogy and democratic education and a fierce opponent to NCLB. As a result, some have observed that with the depressed US and global economies coupled with Obama's neoliberal Secretary of Education, educators can expect even more layoffs, increased class sizes, the continued enforcement of external curriculum standards, and increasingly alienated and impoverished students, who are therefore susceptible to fascist policies. It is not too surprising that secretly corporate-funded groups, such as the

ultra-right-wing Tea Party, have gained scary levels of popularity based on racist attacks against Obama who has obviously not advanced pro-people policies when he himself is part of the corporate structure responsible for extracting more and more of the value generated by the vast majority of humanity's labor power on lands and with resources stolen through a process of violent colonialist imperialism that began in 1492 with Columbus washing up on the shores of the Caribbean Basin.

A critical pedagogy in the United States must therefore be explicitly anti-racist, democratic, have a class-based analysis, and be grounded on the premise that *real change*, that is, revolution, can only come from the organized population, regardless of how progressive or *different* capital's leaders may appear or sound. However, because over 30 million people voted for Obama, largely based on social justice rhetoric, it might be tactically wise in challenging the right wing corporate hold on the American working class to make explicit why the Tea Party (i.e., the extreme corporate right), if in power, will only result in even more suffering and abuse for not just immigrants, Muslims, and other non-Christian (white or not) and non-white people, but inflicted even upon those poor whites who are posed to put a Glen Beck or Sarah Palin in office.

That is, capitalist trade law does not consider the human costs in the competition for market share and wealth extracted from exploited labor power rendering the real interests served by the Tea Party are not the American people, but corporate power and the subsequent necessity of controlling the minds and hearts of all those who rely on a wage to survive. The white workers who are repeating the corporate media's rhetoric of Obama taxing *working people* (i.e., whites) out of their freedom like a fascist Hitler, are really just being used by the same competing capitalists that used them for industrial manufacturing labor until cheaper sources of labor in China, Mexico, Honduras, Haiti, Thailand, and the so-called third world in general, made possible by both military interventions and neoliberal trade policies became available. The discourse argues that illegal immigrants (i.e., Mexicans) come to America and *take* American jobs. What is remarkable about the rhetoric is not only the absurdity of the assumption that America's economy has been undermined by illegal immigrants, but that corporations are rarely targeted as at fault for hiring undocumented workers, if such an action should be deemed so criminal. What this suggests is that behaviorism is always political as it exists to support elite interests (positive association) who are charged with conditioning the behavior of workers (negative association).

A Closer Look at Behaviorism: Foundational Figures in Neo-mechanical Educational Psychology

E. Thorndike

Edward Thorndike is considered to be the scholar and researcher most responsible for the ascendancy of experimental psychology (Pinar, Reynolds, Slattery, &

Taubman, 2000) that presupposes the mind and consciousness are knowable and measurable properties as a challenge to the views informed by Newton and other Western scientists who maintain that the force or cause of our movement is a largely unknowable and mysterious entity. Paradoxically, Thorndike disregards the established knowledge of the scientific community by referring to its content as *philosophical*, and thus not as *objectively true* as the *facts* generated through his more *scientific* methodology. It is therefore not surprising that the field of education, which continues to be informed by a neo-mechanical paradigm, tends not to be taken seriously by the scientific community and institutions of higher education (outside of colleges and departments of education) more generally. A transformative educational leader, in this context, demands that pedagogy and curriculum be informed by what the scientific community agrees are the most up-to-date ideas and knowledge regarding the cognitive nature of humanness. Toward these ends, we will briefly explore the assumptions embedded within Thorndike's approach to teaching and learning, which, I argue, are essentially philosophical.

Thorndike's paradigm, represented most fully in *Educational Psychology* (1910), stands in stark contrast to where scientific knowledge *was* and *is* in regards to human nature and the mind. For example, in *Educational Psychology* (1910) Thorndike's pedagogical place of departure is the presupposition that the primary responsibility of the educator is to control student behavior, which is falsely assumed is possible due to the machine-like quality of the mind. Education, from this perspective, is a mechanical act interested in discovering the most efficient methods of achieving the predetermined outcomes of behavior modification. While Thorndike does acknowledge that there are some qualities and cognitive endowments that are innate or inherited, he places special significance on those that are variable due to environmental factors, such as formal education.

While the scientific community tends to be weary regarding the measurability of little know properties such as intelligence, Thorndike assumes it is well defined and therefore absolutely knowable, measurable, and subject to external manipulation. Beginning his study with this presupposition Thorndike (1910) notes that "exact knowledge of the nature and amount of individual differences in intellect, character, and behavior is valuable to educational theory and practice . . ." (p. 3). The educational significance here, for Thorndike (1910), is that it leads to "knowledge of what human beings are" enabling educational leaders and educators to "choose the best means for changing them for the better" (p. 3). The underlying assumption is therefore an ontological hierarchy where the vast majority are viewed as deficient and therefore in need of *being* educated. The legitimacy of the educational leader as manager and, at times, although increasingly less-frequently, policy maker, in this context, comes from their superior knowledge or intellect.

Consequently, Thorndike (1910) believed that some differences between individuals, such as mental ability or cognition, were due to what he called *remote ancestry*. By this he meant that the more a group has remained isolated and can therefore trace its lineage back within that same group, the more a distinct race they will be. The more distinct, the more unique physical and mental qualities they will posses. Summarizing this point Thorndike (1910) reasons, "an individual may thus,

by original nature, possess certain racial mental tendencies. His position on the scale for any mental trait may be due in part to his membership in a certain race" (p. 51). However, Thorndike (1910) offers a modest qualification noting that because of the high degree of integration between all of the peoples of the world in the modern era, "the influence of remote ancestry ... cannot be isolated for measurement ... perfectly" (p. 51). Despite the difficulty in untangling what is the result of biological endowment and what is the result of social experience and intervention, Thorndike (1910) concludes that "the most noticeable fact about the races of men seems to be their great mental variety" (p. 64).

Thorndike's conclusions here, while they supported the white supremacist dominant sociopolitical–economic order of his own time, were not grounded in valid scientific methodology and rigor. Descartes' (1637/1994) observation that "good sense is, of all things among men, the most equally distributed" (p. 3) had not been refuted by science, although the eugenicists certainly tried. Even Darwin acknowledged that the notion of race is a social construct.

For example, during the mid-1800s when Darwin was engaged in his studies it was commonly argued that "races were so distant from one another that interbreeding was impossible" (Zimmer, 2007, p. 226). Darwin, on the other hand, who, at his best, was truly a man of science, "considered many of the differences between peoples to be minor," so minor in fact that he did not "think natural selection had shaped them" and that our species is "variable" like "dogs or pigeons" (Zimmer, 2007, p. 227). Summarizing these conclusions he reached after years of rigorous academic, field-based study Darwin comments

> The great variability of all external differences between the races of man ... indicates that they cannot be of much importance; for if important, they would long ago have been either fixed and preserved, or eliminated. In this respect man resembles those forms, called by naturalists protean or polymorphic, which have remained extremely variable, owing, as it seems, to such variations being of an indifferent nature, and to their having thus escaped the action of natural selection. (p. 274)

Darwin's scientific habits of mind, at their best, clearly led him away from the false hierarchy of white supremacy and about as far from the so-called *social Darwinism* that attempts to inscribe the racial biases of conquest and capital on his work through the imposition of natural selection, which, to reiterate, was never considered a factor in determining human variability or race. In other words, while Darwin concluded that natural selection must be responsible for human intelligence, it is not related in any way to the socially constructed concept of race, rendering intellectual variability among the species completely random, as suggested by Descartes and others.

Thorndike's mechanical racialized approach that assumes human behavior is as predictable and malleable as a machine, which relies on a static, reducible, unchanging conception of the world, can therefore be understood as not based on science but on the political motivation of the accumulation of wealth through the exploitation of human labor power, which requires a certain amount of control over the human mind. Behaviorism therefore claims to be based on science and therefore

non-political, but is informed by biased and ulterior motives. Behaviorist psychology therefore does not foster an education that is based on intellectual growth and human advancement according to the Enlightenment values of social justice, democracy, and equality, which science is supposed to be grounded.

B.F. Skinner

One of the most well-known founders of behaviorism, Burrhus Frederic Skinner, born in Pennsylvania in 1904, like Taylor and Thorndike before him, advanced the mechanical approach to human nature that is inherently hierarchical and conducive to indoctrinating practices. Regarded as one of the most important psychologists of the twentieth century, Skinner spent the later part of his career as a professor at Harvard. By his many supporters Skinner is deemed a progressive utopian visionary while his critics interpret his work as an attack on the very core of the human essence—our independent creative nature referred to above as *free will*. What follows is a brief critique of Skinners' (1971/2002) *Beyond Freedom & Dignity* where these ideas are most fully explored and elaborated on.

Skinner (1971/2002) begins his analysis making the case that science and technology are simultaneously both the cause *and* the solution of the major social problems of his day such as homelessness and industrial abuses to the natural environment. Skinner recognizes that science, as a tool, is well equipped to fashion technologies that could lay the ground work for the development of a just and responsible society. Aware that science does not work without human agents, Skinner (1971/2002) rightfully concludes that

> The application of the physical and biological sciences alone will not solve our problems because the solutions lie in another filed. Better contraceptives will control population only if people use them. . .and the environment will continue to deteriorate until polluting practices are abandoned. In short, we need to make vast changes in human behavior . . . (p. 4)

Among these problems Skinner (1971/2002) includes "the disaffection and revolt of the young" (p. 4). This statement suggests that his work supports the interests of the ruling elite who become nervous when working people organize and take political action in ways that can be perceived as being done on behalf of their own class interests. To avoid such problems Skinner (1971/2002) proposes the development of a "technology of behavior" (p. 5). Toward these ends, Skinner (1971/2002) clearly breaks from excepted truths within the scientific community, with origins in the work of Newton, Hume, Descartes, Priestly, Chomsky, and others, arguing that "it is easy to conclude that there must be something about human behavior which makes a scientific analysis, and hence an effective technology, impossible, but we have not by any means exhausted the possibilities" (p. 7). Skinner undoubtedly is referring here to that notion of *free will* or consciousness that has been credited as the *cause* of human behavior tending to be *inclined* to act in certain ways given specific environmental conditions, but not *compelled*, making absolute predictability utterly impossible. Skinner (1971/2002), however, argues that in

contemporary times, "intelligent people" no longer attribute the causes of human behavior to "indwelling agents" (p. 9).

Reflecting on Skinner's (1971/2002) *Beyond Freedom & Dignity*, Chomsky (1987) notes that "his speculations are devoid of scientific content and do not even hint at general outlines of a possible science of human behavior" (p. 158). A leading scientist in his own right, Chomsky's (1987) objective here is to disassociate science from Skinners' work because

> He appears to be attacking fundamental human values, demanding control in place of the defense of freedom and dignity. There seems something scandalous in this, and since Skinner invokes the authority of science, some critics condemn science itself, or "the scientific view of man," for supporting such conclusions . . . (p. 158)

What has been particularly objectionable about Skinner's ideas is that they represent an industrialized, mechanical science that is devoid of soul and spirit, that is, freedom and dignity, because they are "merely the relics of outdated and mystical beliefs" (Chomsky, 1987, p. 159) suggesting that the objectives of society's leaders and managers are not to promote independent thinking citizen participants, as our democracy promises, but rather, to institute effective social controls to ensure *the static, unchanging, survival of the culture*.

A. Maslow

Responding, in part, to the growing criticism against behaviorism, in 1968 Abraham Maslow offered an updated psychology that more centrally acknowledged the existence of an "inner nature" that is intrinsic, unchanging, and essentially "good" as it tends toward the well-being of self-actualization. However, Maslow (1968) is clever, he contends that while our inner nature "rarely disappears in the normal person," it is, paradoxically, "weak" and therefore when people are exploited by the "slave owner" or the "dictator" (funny he does not mention the capitalist or colonizer), "most people do not protest . . . they take it" (p. 8). As a result, the oppressed tend to live unfulfilled, miserable lives.

The role of the psychologist or the educational leader is thus to "tell" the oppressed "how to be good, how to be happy, how to be fruitful, how to respect himself, how to love, how to fulfill his highest potentialities" (Maslow, 1968, p. 4). Maslow therefore arrives at the same place as Skinner, that is, because of the deficits of the general population, external conditioning is the moral responsibility of those more supremely endowed. Maslow's complete silence, regarding the pathology of the oppressor, serves only to leave intact the hierarchy of class society.

Again, Maslow advances an ontology of hierarchy where the exceptional few, who are able to retain their internal structure under the stress of external forces, possess a moral responsibility to paternalistically empower and train the structurally unsound masses. Within the imagined universe of this hierarchy it is only the strong who possess the fortitude to grasp and hold on to the truth. Leadership, from this perspective, is equally concerned with controlling information and depositing

predetermined factoids and knowledge about the world and how to be than his prede-cessors and contemporaries. The act of discovery and learning, rather than attributed to anything internal within the learner, is attributed to the proper administration of efficient and productive behavioral modification technologies.

While the work of Maslow and Skinner, by some standards, might seem out-dated and old, their ideas continue to hold sway in the public domain and in public schools and their training programs in particular, and therefore continue to stand as an impediment to democratic practice.

H. Gardner

Howard Gardner introduced his theory of multiple intelligences in 1983 as a chal-lenge to the narrow way cognitive ability had been traditionally measured and conceived. Critical educators therefore "... believed that Gardner stood with us in our efforts to develop psychological and educational approaches that facilitated the inclusion of students from marginalized groups whose talents and capabilities had been mismeasured by traditional psychological instruments" (Kincheloe, 2004a, p. 3). Many teachers, sensitive to the need for a more inclusive conception of intelli-gence that is not Euro-centric, found within Gardner's theory, arguments against the standardization of an inequitable system and the narrow conception of intelligence found within mainstream psychology.

Gardner's (1983) *Frames of Mind* came the same year the Reagan administration released their national education report, *A Nation at Risk*. Steeped in militaristic language, the report signaled a conservative backlash against the gains made through the social justice social movements of the 1960s and 1970s. *A Nation at Risk* argued that liberalism had eroded American values and, consequently, weakened American capitalism. The report therefore called for educational reform to return to the *basics* of reading, math, and science, suggesting that multicultural education and bilingual education, in particular, had watered down the curriculum reducing it to the biased opinions of special interests groups. This cry for accountability ushered in a new era of one-size-fits-all standardization. The notion of multiple intelligences, situated in this context, was therefore a welcome tool used by many educators conscious of the value of multiple perspectives and diverse epistemologies.

However, Gardner's theory, over the course of two decades of criticism, has remained stubbornly a-political as he refuses to acknowledge the ways capitalist class power, self-legitimated through a negative politics of racialization, works to reproduce class hierarchy by, in part, excluding the knowledge and insights of the vast majority, especially people of color such as Africans in America and Native Americans. Rather than seriously considering social forces, such as capitalism and white supremacy, and therefore the social class and culture of the learner, as major factors contributing to how intelligence is measured and, consequently, determining educational outcomes, beyond the manipulative focus of behaviorism, Gardner's work is mentalist attributing differences in cognitive ability to internal or biological

design. His work, while useful in some respects, falls short of transgressing the debunked mechanical paradigm indicative of capitalist education that mainstream psychology has fallen victim to.

More recently, Gardner (2008) has advocated for "five minds for the future" aimed at "individuals who wish to thrive" in the global economy, because, apparently, there are those who wish to perish. Published by the Harvard Business Press, Gardner outlines what he believes are the underlying dispositions required by capital. Consequently, Gardner argues that future workers, to be competitive, should, given the limitations of their own genetically determined deficiencies, develop within themselves the qualities employers are most interested in. In other words, potential workers should bend themselves to meet the needs of capital—not exactly an empowering pedagogy, at least of a working class or liberation perspective.

R. Nisbett

For example, contemporary figures such as James Flynn, Emeritus Professor of Political Studies at the University of Otago in Dunedin, New Zealand, and author of the influential *What is Intelligence?* (2007), and Richard Nisbett, leading scholar in cultural psychology and intelligence and distinguished university professor at the University of Michigan, Ann Arbor, and author of *Intelligence and How to Get It* (2009), have, essentially, advanced an environmental behaviorist approach to intelligence that suggests that Western culture produces smarter people, and schools should therefore, the reasoning proceeds, be reformed accordingly. Because Nisbett's (2009) work, unlike Flynn's, is situated specifically in the context of education, what follows is a brief analysis of *Intelligence and How to Get It*.

Like his predecessors, from Taylor to Maslow and Skinner, Nisbett (2009) begins by attempting to connect his work to legitimate science and the discourse of progressivism arguing, "results of recent research in psychology, genetics, and neuroscience, along with current studies on the effectiveness of educational interventions, have overturned the strong hereditarian position on intelligence" (pp. 1–2). Nisbett is clearly referring to the white promotion of the many discursive constructions that have assumed that people of color are genetically inferior. However, he does not mention the role these discourses served in justifying the enslavement and acts of genocide committed against Africans and Native Americans (Menchaca, 1997), for example. Taking what may appear to be a position for social justice, Nisbett (2009), rejecting genetic causes of intelligence, proclaims "intelligence is highly modifiable by the environment" (p. 2). Careful not to lose his cultural conservative audience, in the very next line, Nisbett (2009) reassuringly notes that "without formal education a person is not going to be very bright" (p. 2).

Consequently, Nisbett (2009) does not challenge the policy makers and educational leaders who control and monitor the validation process that deems some

knowledge valid and other knowledge invalid or wrong. Knowledge produced from Marxist, Indigenous, postformal, and other non-dominant epistemologies, thus, tend not to be validated in formal institutions of education, especially in the K-12 context during the developmentally formative years. In other words, Nisbett and others are saying that there are millions of people around the world who are not "very bright" because they have not been properly *trained* how to think and how to *behave* through the *scientific management technologies* of Western schools, and demonstrated appropriate levels of competence and internalization of accepted values and facts, which happen to be increasingly influenced by corporate interests and saturated with a deeply entrenched Euro-centric culture of deficit thinking.

Returning to the core data and philosophical assumptions of *Intelligence and How to Get It*, what becomes apparent is that Nisbett's supposedly objective conclusions seem thoroughly entrenched in the same deficit thinking he has attempted to disassociate himself from. For example, after his initial discussions Nisbett (2009) exposes his behaviorist orientation commenting "the environment counts for a lot in determining IQ and could conceivably account for more if we could think of the right ways to change it" (p. 22). Intelligence, in this context, is something to be externally controlled and manipulated by those properly trained. Alluding to this cultural bias Nisbett acknowledges the high degree of cultural bias embedded within IQ tests, but does not find it important enough to question the assumptions behind the belief that intelligence is knowable and measurable.

Behaviorism and its recent manifestations—manifestations that may not always self-identify as behaviorist, but are nevertheless informed by very similar constructs—therefore promote a mechanical, hierarchical ontology that conceives the world of humans as nothing more, or very little more, than the manifestation of efficient or inefficient, conscious or unconscious, social engineering—the notion of an internal, independent, *will*, *consciousness,* or *spirit*, in the behaviorist paradigm, is assumed to be a primitive, mystical, unsophisticated superstition of the unenlightened, uneducated, ignorant masses.

The leadership goal here is therefore to develop human engineering tactics that most efficiently and mechanically deposit sanctioned truths and reinforce desired behaviors facilitating the development of student dispositions and skills most conducive to the needs of wealth and power, such as *being a team player* or *works well with others*, which translates into *does what they are told*, *follows directions*, *is obedient*, *does not talk to others when the teacher is talking*. Coincidentally, these dispositions represent the needs of corporations with their hierarchical structures and concentrated wealth and decision-making. This system would be meaningless and ineffective if its traditional, hegemonic keepers of knowledge production and education did not assume that their approach was objectively superior, or representative of the one right answer to social organization. This one right answer approach or one correct way to understand and view the world has legitimated itself by claiming to be based on the neutral, objective facts of science, which exist outside the realm of politics and human error and bias.

Again, leadership, in this context, is not a shared activity between equal stakeholders, but a paternalistic act that is either *done to* or *on behalf of*. Managing teaching and learning is therefore always informed by the presupposition that intelligence is either naturally unequally distributed or it varies according to objectively inferior and superior cultures, and middle-class educational leaders, working in middle and working-class schools, are therefore assumed to be better equipped to make curricular and pedagogical decisions than those most directly effected teachers and students.

However, despite behaviorisms' failure to hold up to the rigorous scrutiny of the scientific community, it continues to inform the training and practice of educational leaders. It should therefore not be surprising that behaviorism continues to inform much of what goes on in schools from leadership/administration to classroom teaching.

Piaget and the Constructivist Revolution

Around the time that Skinner's extreme behaviorist psychology was gaining unprecedented support and praise internationally, and in the United States in particular, a group of psychologists were emerging with a forceful and convincing critique of the underlying assumptions informing behaviorist educational psychology. One of these figures, Jean Piaget, was *discovered* by an American psychologist and introduced his work to an American audience during the 1950s. Summarizing Piaget's role in transforming education psychology Greg Goodman (2010) notes that

> Piaget helped to change the way in which society viewed children by adding a scientifically based inquiry into their cognitive development. Consequently, Piaget's work is foundational to modern educational psychology, and his observations of children have been important in our understanding of developmental changes throughout childhood and into adolescence. Piaget is still considered the most influential developmental psychologist in the history of the Western world. Piaget brought us out of the dark age of thinking that children were either naïve urchins or small people with lives largely undifferentiated from adults. (p. 17)

Before Piaget, children, in Western societies, were viewed as little adults, yet without the same rights and protections. It is therefore not surprising that it was not uncommon for children, except for the children of the ruling class, to toil along side, or in replace of, adults in factories. It was Piaget who first argued that the life cycle of a human being who could scientifically understood as a series of progressively more complex stages of development. It therefore followed that children require special treatment different from adults to ensue their development is supported and nurtured in developmentally appropriate ways. Making this point in *Science of Education and the Psychology of the Child* (1970), Piaget concludes, "since it is natural . . . that mental development is perhaps regulated by constant laws . . . education should make use of that mechanism instead of thwarting its progress" (p. 140). However, this observation, alluding to the genetically determined aspects of cognitive development, never really became central to Piaget's work. Making this point Chomsky (1983) has argued

> Piaget held that the child passes through cognitive states. According to my understanding of the Piagetian literature, Piaget and his supporters were never really clear about what produced a new stage of cognitive development. What they could have said—though they seemed to shy away from it—is that cognitive development is a genetically determined maturational process like puberty, for example. That's what the Piagetians ought to say. They don't like this formulation but it seems right to me. (p. 1)

Again, Piaget placed more emphasis on experience than genetic determination, which makes sense from an educational perspective. That is, experience is the product of human intervention and can therefore be manipulated. Genetics, on the other hand, are immutable and therefore cannot be altered through education or any other social process. Focusing on the implications for education, Piaget's theory, as acknowledged by Chomsky (1983), is considerably more complex and sophisticated than Skinner's behaviorism. That is, Piaget understood that intellectual functioning is an extremely complex and internal activity and far more sophisticated than a simple change in behavior as suggested by the behaviorists. Learning is not just the result of external conditioning and not just the result of the unfolding of a predetermined genetic blueprint, but is *both* physical *and* mental. In other words, children must not only experience a physical phenomenon, but also do something internal with it to really learn it.

For example, some of the most commonly used conceptions from Piaget's developmental theory are the notions of *assimilation* and *accommodation*. Assimilation occurs when the child has assimilated a new experience into their preexisting knowledge base. A common manifestation of this idea is when young children learn to call a dog a dog. For them, this is the name for non-human beings and is therefore equally applied to other species. The next step of development is to differentiate between, say, dogs and birds, which requires the child to realize that there are species-specific traits that render only some animals to be dogs and some to be birds. Piaget suggested that children make such observations or discriminations on their own. The role of adults is therefore to provide children with the language to name their world. Again, Piaget named this process of modifying one's ideas or conceptualizations *accommodation*. Kincheloe (1993) described accommodation as a situation where teachers and students are "encouraged to construct new ways of seeing when beset with an unanticipated contradictory situation," that is, "the reshaping of cognitive structures to accommodate unique aspects of what is being perceived in new contexts" (p. 41). Put another way, Kincheloe (1993) explains that, "through our knowledge of a variety of comparable contexts we begin to understand their similarities and differences," and, as a result, "we learn from our comparison of the different contexts" (p. 41).

Consequently, for Piaget, it is the linear progression of moving through various complex stages of assimilation and accommodation that cognitive or intellectual development occurs. Piaget's model is loosely based around four relatively specific stages of cognitive development:

- Sensorimotor (0–18 months): The infant relies on reflexes to develop their intelligence to solve basic problems of survival. Piaget and Bärbel (1969) challenged

the behaviorists here noting, "for many psychologists this mechanism is one of association, a cumulative process by which conditionings are added to reflexes and many other acquisitions to the conditionings themselves" and all learning is therefore "a response to external stimuli" (p. 5). Offering a more integrated approach Piaget and Bärbel (1969), reflecting on Piaget's early work, comment, "reality data are treated or modified in such a way as to become incorporated into the structure of the subject," which they then conclude, "the organizing activity of the subject must be considered just as important as the connections inherent in the external stimuli" (p. 5). Rather than viewing stimulus–response as a one-way case/effect relationship, Piaget conceptualized it through the two-way ongoing process of assimilation. While the newborn infant does posses fixed, immutable reflexes through which they respond to external stimuli with great predictability, such reflexes are never passive as they develop through assimilation and accommodation evidenced by infants' ability to learn the difference between nipples and other objects. In other words, while this early stage is basic, it is not characterized by passive, external conditioning, but involves complex internal mechanisms or *constructions.*

- Preoperational (18 months to 6 or 7 years): Here children begin to employ symbols and complex internal reasoning to solve problems, but are still tied to concrete objects as they remain easily confused by abstract ideas.
- Concrete operational (8–12 years): Children at this stage being to use abstract thinking and more complex forms of logic and problem solving. Perception here becomes noticeably more refined and therefore fooled less by perception. However, a firm base in concrete objects remains fundamental to their growth and understanding.
- Formal operational (12 years to adulthood): Here young adults enter Piaget's most advanced stage of cognitive development demonstrating a sophisticated ability to think both abstractly and hypothetically. They are not so tied to the concreteness of the here-and-now, which is characterized by the ability to spend long periods of time cognating in the *far away*, both spatially and temporally (Trawick-Smith, 2000). Piaget and Bärbel (1969) argue that teachers and researchers know when this stage is present because, "the subject succeeds in freeing himself from the concrete and in locating reality within a group of possible transformations" (p. 130). It is described as a "final" and "fundamental" move toward "decentering" occurring "at the end of childhood" as the individual becomes more interested in the "non-present" and "future" marked by "great ideals" and the "beginning of theories" (Piaget & Bärbel, 1969, p. 130).

Goodman (2010) argues that Piaget's legacy continues to fundamentally inform the work of teaching and learning as evidenced through the continued dominance of the idea that *all children naturally develop through a series of changing processes*, which can be understood as *the unfolding of a genetic code*. It therefore follows that the more aware teachers are of how students construct meaning and knowledge through these stages of development, the better equipped they will be to meet the learning needs of the students they work with. In other words, Piaget's formal

model of development is linear moving in relatively rigid stages from the rudimentary level of infancy to the complex or advanced state of adulthood. A good teacher therefore *knows where their students are at* and can therefore provide *developmentally appropriate instruction* (Goodman, 2010; Jardine, 2010a, 2010b; Kincheloe, 1993; Mayer, 2010; Piaget, 1970; Piaget & Bärbel, 1969).

This developmental process where the child continuously builds upon previous knowledge suggests a worldview that is constructed. That is, a child, for example, who does not know mathematics, then she or he will not construct enumerated knowledge about the world. For example, students who do not know how to count will not observe the world in numbers, such as a room with *six* chairs, but rather, a room with *some* chairs. Again, this knowledge of student development and where they are at, argued Piaget, is indispensible for creating meaningful learning experiences for individual learners. After all, very rarely do teachers encounter a class of students who are all at the same stage in their intellectual development (Jardine, 2010a).

Thus far, this discussion has exclusively focused on the brilliance and originality of Piaget and his developmental cognitive psychological paradigm. However, what has not been touched on are the philosophical roots of his theories. The philosophy of education (see Malott, 2008; Malott et al., 2009) challenges us to be conscious of the underlying philosophical assumptions behind the construction of all curricula and pedagogy, including the work of Piaget. Because of the widespread influence Piaget's work has had on education, as described above, it is worth pausing for a moment to reflect on the philosophy informing his theories, which will then assist us in better understanding how and why he has been critiqued, and for many, transcended.

It is not a secret that Piaget's philosophical place of departure was the German philosopher Immanuel Kant, who, in 1784 declared, "Enlightenment is man's release from his self-incurred . . . inability to make use of his understanding without direction from another" (Kant, 1995, p. 1). Writing during the time of the French Revolution and the state's violent repression of it, Kant argued against the ruling-class presupposition that the ignorant masses are too stupid and incompetent to be trusted with freedom. Rather, Kant insisted that it would be impossible for a person to acquire the necessary maturity for freedom without already possessing it. That is, without being free to use one's faculties and intellectual endowments without external coercion, a society or class of people will never be able to achieve reason and enlightenment.

For Kant then, the free human, or the human whose natural dispositions are not oppressed or subjugated, is one who constructs meaning *about* the world through an engagement *with* the world, and, in the process, imposes *structure*, *order*, and *determines* its trajectory. Kant's work has therefore been rightly identified as standing, "at the advent of what has come to be known as constructivism" (p. Jardine, 2010a, p. 123). Kant argued *against* the empiricist idea that all human knowledge is the result of reflections or actions conducted after having some experience impressed upon it. The mind, from this mechanical or behavioral perspective, begins as a blank

slate, and everything of the mind is a direct result of this external stimulation. Kant, rather, argued that the mind has built in systems of logic, ordering, and language that predetermines the species for creative work and intellectual freedom. That is, Kant argued against the mechanical philosophy that denies humans their fundamental humanness—our propensity for the creative use of language and non-alienated labor power.

Ontologically, therefore, our understandings of the world are not objectively known, but are constructed in our minds as we actively, not passively, engage the world. The nature of reality is therefore not *fixed* but *constructed*. For example, humans, through the mechanisms of their own internal reasoning, can construct the earth and the natural world as a vast supply of unused or untamed, potentially profitable natural resources, or as a large, living, interconnected *being* whose overall health depends on the individual wellness of each seemingly isolated ecosystem and organism. Epistemologically, Kant therefore views knowledge as the substance of a constructed universe. For example, the scientific knowledge that has been produced through viewing the world as *unrealized profit* is vastly different than the knowledge produced from the *interconnected* and *interdependent* worldview or interpretive framework.

It is precisely this ability to self-reflect or *reason* alluded to by Kant that situates humans, as far as we can tell, unique among all the species. That is, humans are not only able to be free from the determinism of impulse, but we are able to become conscious of that freedom rendering us much more than *beast machines*. That is, the behaviorist assumption that the development of human beings is based solely on simple external conditioning is fundamentally dehumanizing and offensive. We might therefore conclude that Piaget's work was an attempt to begin re-humanizing educational psychology at a time when it was under attack from powerful behaviorists interested in subduing a population recently radicalized from the Great Depression of 1929 (Malott et al., 2009).

Beyond Piaget: An Introduction to Postformal Psychology

Nearly 20 years ago Joe L. Kincheloe (1991) began transgressing the limits of Piaget's formal constructions of cognition and possibility. While Kincheloe (1993) embraced the brilliance of Piaget's insight, "there is an unavoidable interaction between a subject and an object," he places this observation back in the social/political context in which it exists, noting, "Western philosophical and educational thought…arrogantly fastens a signifier to a signified" (p. 61). As a result, words like *civilization*, according to Western elite discourse, have come to signify whiteness, Europe, capitalism, industrialism, English, etc. and "certainly not linked to African modes of living" (Kincheloe, 1993, p. 61). Such discursive maneuvers thus pave the way for the justification of slavery, colonization, and the eradication of non-Western cultures and knowledges through the cultural genocide of a domesticating education and corporate media. Offering a critical place of

departure for advancing the constructivist psychology of Piaget, Kincheloe (1993) summarizes:

> Employing critical theory to push Piaget one more cognitive step, a more critical notion of accommodation is offered. Understanding the socially constructed nature of our comprehension of reality, critical accommodation involves the attempt to disembed ourselves from the pictures of the world painted by power. (p. 41)

Again, what Kincheloe is arguing here is that Piaget's conception of cognitive development does not acknowledge the internal content or assumptions within the constructions acquired through assimilation and accommodation. For example, dominant society institutions teach students, for example, that the differences between social classes in a capitalist democracy, such as the United States, can be accounted for by a natural hierarchy of intelligence and drive where the elite class is elite because of their superior qualities and intelligence, and the working classes are workers because of their average, lower levels of intelligence and drive. A *critical* accommodation, however, would focus on the role power has played in shaping the labor/capital relationship where a small minority profit from the labor power of the vast majority. Such an approach would look to the historic role of violent conquest, colonization, enslavement, and ideological indoctrination as central factors explaining the current complex and contradictory structure of society. Left unchallenged in Piaget's model is therefore the ways in which schema are socially constructed by dominant forms of power as part of the process of reproducing basic structures of power.

Kincheloe (1993) paints a picture of his postformal conception of accommodation in practice as teachers gaining the ability to understand the difference between the ideas of intelligence as they are portrayed by the dominant, ruling society and the *actual* intelligence of marginalized people relegated to the scrap heap of the assumed *unintelligent*. Informed by such a conceptual framework the postformal educator is able to challenge the assumptions about who is smart and who is not smart as dictated by standardized test scores. The postformal educator here understands that the forms of subjugated knowledge and intelligence of non-dominant groups and non-hegemonic traditions, such as Marxism and indigeneity, produce rich and valuable knowledge not coded for or normalized by standardized tests because they challenge the basic structures of power by disrupting their basic assumptions.

Returning to our previous example, one of the primary underlying assumptions within the current industrial capitalist model of society, a continuation of the Columbian pedagogy of conquest and plunder (Malott, 2008), is that Western civilization (i.e., neoliberalism) represents the most advanced stage of human cultural development and therefore produces smarter people than other arrangements or modes of civilization. Consequently, standardized tests treat the normalized and naturalized view of capitalism as a *non-perspective* or *just the facts*. In other words, it is an unstated assumption, or presupposition, that current industrial capitalism represents the most advanced stage of human progress—the 1989 fall of Soviet Communism is the taken-for-granted evidence of the triumph of capital and the end of history.

While this tendency is the overwhelming norm, it is currently being questioned within the mainstream dominant society as Americans are watching the Gulf Coast transform into a mammoth dead zone at the hands of what is emerging in the public eye as an increasingly irresponsible corporate practice of high-risk, high-profit plunder. In this case British Petroleum is the culprit. Mainstream pundits are beginning to acknowledge the need to *get off oil*, that is, to end our *addiction to fossil fuels*. While the scientific literature certainly supports such conclusions and recommendations, left untouched is the basic model of industrial capitalism. The fuel to power the machine is the only part of it that the mainstream press is challenging. A critical accommodation would challenge us to take our analysis as deep and complex as possible.

Armed with an understanding of how hegemony works, educators with this critical approach to accommodation are uniquely situated within the critical pedagogical movement as change agents and *intelligence agitators*. In other words, postformal educators work to uncover where dominant forms of power are located and how they operate as part of the process of subverting them for paradigmatic transformation.

Kincheloe coined the term postformal in the 1980s as he sought new ways to construct a critical constructivist educational psychology in response to the growing power and influence of mechanical, technicist, psychometrics embodied in the decontextualized, *one-size-fits-all* approach of the *back-to-the-basics* movement. As we argued in the "Introduction" to this volume, psychologists blunder when they study cognition, teaching, learning, motivation, human development, identify formation, etc., as only psychological processes—not as psychological *and* sociological, political, economic, cultural, linguistic, and other processes as well. For example, as suggested above, Jean Piaget's decontextualized study of children removed questions of cultural context from his observations and analyses. Did non-European cultures, we might ask, develop in the same way? What about in other historical periods? Postformalists, socio-cognitivists, and other cultural psychologists ask: what does it say about not only Piaget, but also educational/developmental psychology in general that such questions have not been adequately asked?

Subjugated Contributions to Postformal Psychological Knowledge

As we begin to more directly outline our postformal, critical approach to educational psychology, we can begin by reviewing the scholars who have contributed to the foundation of what Kincheloe and others have identified as postformal psychology.

S. Freud: The Complexity of Consciousness

Like the contributions of Jung, the useful insights of Sigmund Freud too remain clouded in distorted images of his work. Freud was born in 1856 in a small town

in what is now formerly known as Czechoslovakia. Freud, writing and conducting research in the midst of the Great Depression of 1929, and therefore witnessing, even if he never fully named it as such, the psychological damage of an alienating capitalist system that views the citizen, and ultimately the student, as passive receiver of commands and direction, challenged the mechanical paradigm for a more complex and contradictory human subjectivity of antagonism. For Giroux (2009), "Freud's metapsychology provided an important theoretical foundation for revealing the interplay between the individual and society," and therefore, "the antagonistic character of social reality" (p. 41). The significance of Freud here, argues Giroux (2009), is that he reveals the processes through which "society reproduced its power in and over the individual" (p. 41).

Making this point, Freud (1938/1995), in a discussion on the history of psychoanalysis, boldly claims that he "worked out independently," what he named, "the theory of repression" (p. 907). We might say that *repression*, in the Freudian sense, is the idea that in an oppressive society that demands obedience in work and other relationships, certain *natural* human drives and desires, such as the creative and free use of language and labor, are subjugated. Consequently, the sources of this repression remain buried in the subconscious because the individual is "trying to repress" something to which they "object" (Freud, 1938/1995, p. 190). That is, the realization that they are dehumanized. Freud called this phenomenon *resistance*, which typically occurs when psychoanalysts attempt to engage individuals in their repressed humanity. However, Freud does not fall victim to the behaviorist approach that assumes the individual is nothing more than the product of accumulated external conditioning. That is, Freud (1938/1995) acknowledges that within the repressed individual the "psychic mechanism" that allows "suppressed wishes to force their way to realization," despite indoctrination and oppression, "is retained in being and in working order" (p. 256).

Commenting on the central importance of the notion of repression to his overall theory or interpretive framework, Freud (1938/1995) comments that

> The theory of repression is the pillar upon which the edifice of psychoanalysis rests. It is really the most essential part of it, and yet, it is nothing but the theoretical expression of an experience which can be repeatedly observed whenever one analyses a neurotic. (p. 907)

Giroux outlines how these insights informed members of Germany's critical Frankfurt School, such as Marcuse and Adorno, around World War II and after to help them understand how both capitalist and socialist societies operated according to authoritarian principles of governance and enforcement. Frankfurt School scholars argued, in their more liberatory moments, that only through a detailed understanding of how power is reproduced psychologically that it could be subverted and transformed. Herbert Marcuse (1964), for example, in *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society,* observes that "Freud's fundamental insight that the patient's trouble is rooted in a *general* sickness which cannot be cured by analytic analysis" and therefore suggesting that "the patient's disease is a protest reaction against the sick world in which he lives" (p. 183) was a

ground-breaking insight paving the way for more contextualized understandings of mental illness.

However, Marcuse (1964), and other Frankfurt School scholars, broke with Freud's conclusion that "the physician" should ignore the larger political and economic sources of the *sick society*, and, rather, "restore the patients health to make him capable of functioning normally in his world" (p. 183). A critical psychology, rather, seeks to cure the patient *not* to serve the interests of the ruling class' industrial society, but as a revolutionary act, that is, as part of the process of curing or transforming the sick society, which Marcuse identified as *advanced industrial*. Making this point Giroux (2009) comments that "Freud's emphasis on the constant struggle between the individual desire for instinctual gratification and the dynamics of social repression provided an indispensible clue to understand the nature of society and the dynamics of psychic domination and liberation" (p. 41). Honing in on this contribution of Freud, David McNally (2001) summarizes

> Freud added . . . the history of the libidinal body. Freud sees the body as a site of drives for love, happiness, social attachments, and erotic fulfillment whose frustrations and satisfactions produce complex histories, products of conscious narratives, and unconscious wishes. Since trauma, fantasy, language, and desire are constitutive of it, this erotogenic body is not reducible to the life-history of the physiological body; its experience is simultaneously organic and psychic. (p. 8)

Consequently, Freud argued that whenever human desires and drives are suppressed or subjugated, such as the creative use of language and labor, people suffer, become psychologically and physically ill, and develop disorders. Freud therefore challenged, or paved the way for others to challenge, as suggested above, the dominant paradigm that views illness as a decontextualized *condition of the week* where remedies therefore come from external, stronger, more intelligent sources by arguing that humans are not machines but have internal desires and needs that must be met through self-directed agency. It is therefore not surprising that Freud is often credited with establishing the psychological arguments and justifications for maximizing opportunities in schools for the free expression of the child as a central theoretical underpin of the progressive educational movement (Pinar et al., 2000).

In the 1980s, critical curricularists, such as William Pinar, utilized these Freudian conceptual frameworks of the relationships between individuals and society to help explain how race is used ideologically to maintain basic structures of class power. That is, through the tacit image of the ego, or the ideal self, which was the white, male, entrepreneurial, paternalistic, although necessarily wicked, and unusually intelligent master, the dominant discourse simultaneously portrayed the id, or the emotionally unstable inferior *self*, as black, brown, criminal, or potentially criminal, obsessed with the flesh and pleasure, and therefore more of *the body* than of *the mind.* Consequently, the hierarchy between the capitalist class and the working classes becomes normalized and naturalized as nothing more than the objective consequence of the dependence of the inferior *id* on the superior *ego* (Pinar et al., 2000).

Providing a hint into the influence of Freud's scholarship on the critical traditions, Kincheloe (1993) includes him with the like of Jung and therefore among

those who "planted mines in the sea of modernity" that destroyed "absolute truth" once "denoted" by "critical postmodernists" (p. 166). In the wake of this destruction what became apparent to critical pedagogues such as Kincheloe, Giroux, and others is that science is no more or less an inventive act as are fictional narratives. In other words, the knowledge produced through the scientific method, contrary to the claims of Western scientists, is not a neutral reflection of objective reality, but is a socially constructed product of human creativity. The reductionistic and mechanistic views of the self in society as nothing more than the product of either the external conditioning or the unfolding of internal biological designs are not objective facts, as behavioral and other so-called scientists would have us believe, but are politically driven conclusions made by men and women who have not come to terms with their own biases and the way they have been shaped by the dominant ideology and values.

C.G. Jung: Collective Conscious and the Emerging Individual

> Today educators remain unaware of Jung's work despite a general renaissance of interest in the Swiss psychoanalyst's contribution. (Pinar et al., 2000, p. 80)

Behaviorism finds comfort in the anti-intellectual atmosphere of the politics and policy of education in the twenty-first century (Malott, 2010a). It is therefore not surprising, as argued above, that teachers today tend not to be familiar with the ways in which not only Freud's but Jung's academically rigorous work might enhance and enrich teaching and learning. As we observe below, not only is Jung's work little known in education, but the ways in which Native American cosmology informed his thinking tend to receive particularly scant attention. While these Native American connections are well known and reflected upon by Jungian scholars generally (Deloria, 2009), within education his European influences and contemporaries are more often commented on.

For example, Jung was a contemporary and acquaintance of the self-important Sigmund Freud. Viewing Jung as his predecessor, however briefly, Freud (1938/1995), in his history of the discipline, comments, somewhat paternalistically, "it was now my desire to transfer this authority to a younger man who would, quite naturally, take my place on my death" (p. 928). However, after further reflection Freud (1938/1995) rather bluntly concludes that this was "a very unfortunate choice" because of Jung's "race prejudices" and his inability to tolerate "the authority of another" (p. 928).

Reflecting this hesitation expressed by Freud, in the Foreword to his fathers' posthumous book, *C.G. Jung and the Sioux Traditions: Dreams, Visions, Nature, and the Primitive* (2009), Philip J. Deloria reflects that Vine Deloria Jr., as "a staunch critic of both colonialism and evolution . . . had a difficult time squaring his appreciation for Jung's cosmology with Jung's culturally-inflected discourse" (p. iii). Of particular interest to Deloria (2009) were the ways aspects of Jung's psychology were influenced by his relatively short visit to Taos Pueblo in 1925 where he spent a few days, amounting to only a few hours, in discussions with Ochwiay Biano

(Mountaion Lake), a Taos tribal elder, although Jung incorrectly referred to him as Hopi in his book *Dreams, Memories, Reflections* (referenced in Bernstein, 2009).

Significantly, however, despite the brevity of their discussions, Jung (1983) was shaken to his Western core by Mountain Lake's observation that white people, from an Indigenous point of view, seemed unexplainably mad or mentally ill, as they are driven by insatiable *want* and *desire* engaging the world through their intellect only, and, in turn, catastrophically neglecting the humanitarian impulse of *the heart*. Reflecting on Mountain Lake's observation, Jung (1983) noted that he "had drawn for me a picture of the real white man," which represents "our vulnerability" and therefore "hidden" to most white people. What this illuminated for Jung was the unconscious psyche and the importance of listening to one's inner wisdom, which attempts to speak to individuals through dreams and visions. In order to learn from this inner, often hidden, wisdom, one must learn to read, through a process of active engagement, the messages presented to us through what Jung called our *psyche*.

Jung (1983) saw a direct, historical connection between this *weakness of whiteness* to the barbaric Roman conquest of Gaul, to the savage brutality of Columbus, Cortes, and the conquistadors. That is, Mountain Lake provided Jung an interpretive framework, which allowed him to observe the seeming timeless European drive to ignore *the humanity of the heart* for the cold, calculating quest for wealth, regardless of the human and environmental costs. However, Jung, coming from a fixed developmental point of view, believed that the best whites could do was to understand their psyche, real change was viewed as impossible.

Despite such limitations, it is not surprising that Jung's work is among those who had an impact on Kincheloe's (1993) postformalism. Jung, in fact, named his work "critical psychology" (Jung, 1971, p. xiv). *Critical*, in part, because he challenged the romanticism of Rousseau (and others), who argued that the current depravity of humanity was preceded by, "an earlier, more perfect type of man, who somehow fell from his high estate" (Jung, 1971, p. 83). Jung (1971) points to Rousseau's insistence that modern society demands individuals suppress their need for creative independence for the larger need of the collective, which leads to a dehumanizing alienation non-existent in antiquity. Challenging the back-to-the-basics formula of Rousseau, Jung (1971) comments

> This suppression of individuality is nothing new, it is a relic of that archaic time when there was no individuality whatever. So it is not by any means a recent suppression we are dealing with, but merely a new sense and awareness of the overwhelming power of the collective. One naturally projects this power into the institutions of Church and State, as though there were not already ways and means enough of evading even moral commands when occasion offered! In no sense do these institutions possess the omnipotence ascribed to them, on account of which they are from time to time assailed by innovators of every sort; the suppressive power lies unconsciously in ourselves, in our own barbarian collective mentality. (p. 82)

The educational implication of this insight lies not only in avoiding the construction of historical knowledge based on incorrect presuppositions, but locates social change within each individual avoiding the prescriptive paternalism of missionary work where the assumed *superior* and therefore *saved* do the assumed *inferior*

and thus *unsaved* a holy favor by liberating them, reinforcing, in turn, the original ontological hierarchy. The collective unconscious that leads to the hegemonic reproduction that so many have passionately spoke of is therefore subverted by this ontological paradigm shift from hierarchical paternalism to horizontal personal responsibility and self-determination and natural freedom.

A Jungian pedagogy therefore rejects not only traditional approaches to education that assume that teachers save kids from their inferior cultures by implementing the policies of the superior ruling class, but also the assumption that the only thing that needs to happen for revolutionary change to occur is for dominant institutions to be replaced by ones led by the organic leaders of the oppressed classes. In practice, traditional revolutions follow a hierarchical structure where movement leaders develop vision, agenda, and tactics and an army of activist-pawns carry them out.

A Jungian revolution, on the other hand, would be much more complex involving all members of society engaged in serious, rigorous self-reflection, and theoretical and historical investigations. The new society would emerge out of a rejection of the hegemonic collective unconscious and therefore as a byproduct of a mass critical self-awareness that makes decisions not based on externally imposed values, but by those emanating from the internal structure of full consensus.

However, preventing this Jungian revolution to come to full fruition, Jung's own internal hierarchies must be confronted and dismantled. It has been argued that Jung's conception of the psyche, while embodying potentially transformative aspects, fails to completely break from the Western hierarchy of which Jung himself, as a European, was a product. Deloria (2009) points to Jung's evolution-based conceptualization of "the primitive" as the under-developed counter-part to the superior Western (i.e., *modern*) psyche. As the first comprehensive challenge to Jung's Euro-centrism written from the point of view of someone Jung would identify as a "primitive," Deloria's (2009) *C.G. Jung and the Sioux Traditions: Dreams, Visions, Nature, and the Primitive* is not only unique, but in correcting Jung's mistakes, the text extends and contributes to Jungian psychology. Jung himself, while viewing the Western psyche as further along the evolutionary scale than his over-generalized/reduced, monolithic conception of the *American Indian*, thereby failing to recognize the vast differences between Indigenous peoples the world over, Jung fails to fully problematize as a social construct, notions of cultural evolution. However, Jung does not necessarily view this evolution as a positive or healthy process.

In the 36 years he lived after meeting Mountain Lake, Jung consistently "laments the tragedy of Western culture's split from nature" (Bernstein, 2009, p. xv) concluding that this disconnection has resulted in a thoroughly dehumanized world as the collective unconscious is largely unaware of itself as fundamentally unhealthy. Unlike Deloria (2009), however, Jung deterministically viewed this condition as fixed and irreparable. Drawing on both the strengths of Jung and the Delorian challenge that the Westernized mind, through the insights offered by indigeneity, can be self-healed and transformed and reconnected to nature, self, and other, Bernstein (2009) comments

> It is my contention that nature itself has as crucial a role to play in the survival of our species, as does man's ego and science and technology. By this I mean that the collective unconscious is speaking to us through our individual and collective dreams and transrational experiences, which are becoming more and more prevalent and are addressing the ecological catastrophe that we face. It is also moving the Western ego towards a re-connection with nature—not a return to a connection that once was, but a connection in the current context of collective and individual consciousness. This is being manifested in what I have come to call Borderland consciousness...It is in this realm that nature has once again begun to speak to and through the Western psyche. Our capacity to hear and take in what is being said may determine our survival as a species. (p. xvi)

Herein lies the revolutionary potential of Jungian psychology coupled with a Delorian challenge to the Euro-centric hierarchy of evolutionary theories that assumes development, because it is evolutionary, is immovable. Deloria, in fact, argued that Jung alone provided a bridge from which the Western mind might engage and comprehend indigeneity.

L. Vygotsky: Challenging the Determinism of Mechanical Philosophy

In his *Critical Pedagogy Primer* (2008a) Kincheloe identifies Vygotsky as a foundational scholar in critical pedagogy, and, of course, postformalism. Introducing this connection Kincheloe (2008a) observes that "Vygotsky is a central figure in the development of a critical psychology, a critical learning theory that can be employed in a critical pedagogy" (p. 67). Vygotsky's position against the decontextualized nature of behaviorism was supported by his insistence that the *behavior* of individual social actors cannot be disconnected from the social–historical–cultural context in which it is situated in practice. This emphasis on context has provided critical educators a theoretical tool to understand the ways power and privilege influence the psychological processes of learners. Teachers in this paradigm therefore become cultural workers drawing on the cultural knowledge of their students as a pathway to psychological empowerment and a place of departure for making connections between students' lives and their cultural and classed experiences with the larger structures of capitalist power we are all embedded in as workers and bosses.

Vygotsky was a student in Russia at the height of Wundt's popularity and influence in the field of experimental psychology. Beginning his work as a Psychologist after the 1917 Russian Revolution, Vygotsky's contemporaries were the pioneering stimulus–response behaviorists, Pavlov and Watson (Cole & Scribner, 1978). It is therefore not surprising that his approach challenges the decontextualized determinism of both mentalism and behaviorism. In his theories concerning the development of thought and speech, for example, Vygotsky clearly broke with the tradition of reductionistic theorizing that reduces the essence of humanity to either its biological determinants or its capacity for stimulus–response conditioning disconnected from the social–historical context in which they are situated. Because of Vygotsky's strong emphasis on the social context of cognitive development, he is known as a

socioculuralist or a social psychology. Socioculturists tend to view Piaget's model, for example, as placing too much emphasis on internal mechanisms for explaining the processes of thinking and learning, and not enough on external or social influences such as language and culture.

Clearly writing from this sociocultural perpsective in *Thought and Language* (first appearing in Russia in 1934), Vygotsky (1962), challenging the mentalism indicative of Wundt and the decontextualized behaviorism of Pavlov and Watson's environmentalism, notes that "verbal thought is not an innate, natural form of behavior but is determined by a historical-cultural process and has specific properties and laws that cannot be found in the natural forms of thought and speech" (p. 51). As a result, Vygotsky comes to a more complex and original conclusion arguing that the "development of behavior" can be understood as being "governed" by "the historical development of human society" (Vygotsky, 1962, p. 51). In other words, Vygotsky downplays the notion that humans are endowed with a built-in language acquisition device that operates mechanistically without thought or indoctrinating and political influences, and rather emphasizes the importance of "outside factors" such as "socialized speech" in the "development of logic" (Vygotsky, 1962, p. 51). As we observe in the next section, critical pedagogy has greatly expanded on the political implications of Vygotsky's work.

However, Vygotsky (1962) does not completely discount the insights of his predecessors and contemporaries. For example, he recognizes the biological in his social theory of learning commenting that children "'discover' the symbolic function of speech . . . not suddenly but gradually, through a series of 'molecular' changes" (p. 50). Again, the philosophical perspective advanced here by Vygotsky is therefore based on an ontology and epistemology of complexity that brings to the fore the socially constructed nature of internalized schema. Vygotsky's approach to education therefore focused on the importance of context and culture in the intellectual development of children. At the center of his model was what he called the zone of proximal development (Vygotsky, 1978), which has been described as "an analytical tool for evaluation of school children's development in connection with schooling" based on the assumption that "development and instruction are socially embedded" (Hedegaard, 1990, p. 349). In other words, while other leading psychologists focused their inquiries on superficial sensory input data, Vygotsky embraced the higher psychological processes other scholars avoided, which took him directly into the heart of the cultural and social, the domain in which the mind develops.

His influence on the founders of critical pedagogy, such as Paulo Freire, who, like Vygotsky, places special emphasis on the interaction between the concrete and theoretical contexts, is made clear by Freire (2005) himself in *Teachers as Cultural Workers: Letters to Those Who Dare Teach* commenting that "it is undeniably important to read the works of . . . Vygotsky" because he understands "the relationship between reading and writing" as "processes that cannot be separated" and should thus be "organized" by educators "in such a way as to create the perception that they are needed for something" (pp. 43–45) because knowledge is not separate from the social worlds in which it emerges. Building on the work of Freire,

Vygotsky, and others, Marcia Moraes (1996) observes that language is "ideological" because it is "socially constructed" rendering Chomsky's work shortsighted for neglecting the "ideological environment within the process of acquiring a language" which is fundamental in understanding the discursive role of speech for it "embraces cultural, historical, and political dimensions" (p. 8). Elaborating on this critique, Bruner (1990) offers some contextualization, clearly influenced by Vygotsky's social–historical psychology:

> Because the lexico-grammatical speech of almost all children improves steadily during the early years of life, we too easily take it for granted that language acquisition is "autonomous." According to this dogma, part of the Chomskian heritage discussed earlier, language acquisition needs no motive other than itself, no particularly specialized support from the environment, nothing except the unfolding of some sort of self-charged "bioprogram." (p. 89)

Six years after these observations Bruner (1996) concedes, in part, to Chomsky's analysis, reflecting that "something in our genome makes us astonishingly adept at picking up the lexico-syntactic structure of any natural language" (p. 184). Bruner seems to have accepted Chomsky's assertion, which he has maintained through many years of ridicule, mentioned above, that his analysis should not be considered "controversial" or political.

However, Macedo, Dendrinos, and Gounari (2003), in their appropriately named *The Hegemony of English*, note that Chomsky's presentation of language as a "unitary innate system" that "relegates all variation to the random vagaries of performance" has been instrumental in influencing "the norm of monolingualism" (p. 51). In other words, by employing a form of essentializing reductionism that reduces the species to its common *language-organ* element, largely ignoring language differences because they are scientifically insignificant, Chomsky has failed to address the monumental political implications of language acquisition situated in its social context, and, as a result, has been susceptible to the oppressive politics of monolingual homogenization. Summarizing the social context of "linguistic function" Macedo, Dendrinos, and Gounari (2003) note that

> Linguistic functions are not restricted to simple reflection or expression. Language actually shapes human existence in a dual way. For one, it affects the way humans are perceived through their speech. Secondly, individuals develop discourses that are formed through their identity in terms of class, race, gender, ethnicity, sexual orientation, popular culture, and other factors. Discourses should be understood ... as systems of communication shaped through historical, social, cultural, and ideological practices, which can work to either confirm or deny the life histories and experiences of the people who use them ... The proposition that language is neutral or non-ideological constitutes, in reality, an ideological position itself. (pp. 26–27)

The importance of these analyses and critiques cannot be over-stressed because it cannot be denied that our "innate design" develops in a social, historical, political context as argued by Vygotsky, and advanced by Freire, Macedo, Kincheloe, and many others, by giving special attention to the role that power plays in legitimizing certain knowledge and subjugating other knowledges (Kincheloe, 2005). Our

individual ideas, collectively our worldviews, are therefore informed by particular philosophical paradigms (Malott, 2008).

Through philosophy our biological endowments, following this theoretical framework, can be put to work for or against others and ourselves. We might conclude that our biology is not political or controversial, as Chomsky contends, but its manifestation *is* both political and highly controversial because it always develops in a social–historical context, never in a vacuum, as noted by Macedo and his colleagues (2003). From this perspective, separating the biological from the social, or the internal from the external, represents the danger of what we might call over-reductoinism—which is, in a word, and at best, shortsighted. Simultaneously, however, while biological processes, in and of themselves, are not political, in practice, they are always political because they are always situated in a social context, and the social is never *not* highly political and contested. The biological, from a slightly different perspective, is thus fundamentally important to the pedagogical because it offers invaluable insights into how the mind works and constructs knowledge through practice and experience and *always* firmly situated in a social context.

Kinchloe (2005) reminds us that power is central to legitimizing types of knowledge particularly as it is expressed within the context of schooling. In the case of K-12 science teaching, school itself defines what counts as science knowledge for children. Science in school contexts goes through its own evolution as students' progress from early childhood through the secondary context. In early elementary classrooms, teaching often aligns pedagogy with children's innate ability to construct sophisticated arguments. For instance, the well-known early childhood science text *Science Experiences for the Early Childhood Years* (Harlan & Rivken, 2008) argue that when the "innate human desire for understanding the world is organized into careful ways of collecting, testing, and sharing information, it is called science" (p. 4). Chaillé (2008) adds support to this notion that children must use inquiry-based, constructivist practices as they wrestle with ways to better "understand the world" (p. 14). Constructivist approaches to science argue that learning is a result from observing the natural world, scaffolding that information with prior conceptions, and interacting with more capable peers to construct new understandings (Barba, 1998; Llewellyn, 2002).

Paulo Freire

Often credited as the founder of contemporary critical pedagogy, the late Brazilian critical educator, Paulo Freire, is perhaps the single most important educator in influencing educators to focus on the historical development of power as the focal point around which we can understand and challenge the *purpose* of education in an imperialist/colonialist and neoliberal capitalist global context. Freire challenged the behaviorist impulse of what he called *the banking model* of education. Within this dominant paradigm the teacher and/or the creators of curriculum are deemed to be the sole possessors of valuable knowledge rendering students as void of useful

information and understandings. In this model, education is something that is done to you—you go to school to *be* educated. In this context the students' success is measured by how well he or she can follow directions and regurgitate prepackaged knowledge—often referred to as *the* "right" answer (Freire, 1998). This prepackaged knowledge represents the values, ideas, and believes of the dominant ruling class.

Freire (1998) therefore argues that it is common for the oppressed, when engaged in resistance against dehumanization, exploitation, and subjugation, to act in dehumanizing ways, because, to a large extent, they have been shaped by the ideology of their oppressors. Because this tendency is so common it has been named *internalized oppression*. What these issues speak to is what Freire (1998) refers to as "the duality of the oppressed: they are contradictory, divided beings, shaped by and existing in a concrete situation of oppression and violence" (p. 37). Thus, in our efforts to create a more humane education and, ultimately, society, there will no doubt surface traces of the old paradigm (Freire, 1998). According to Freire, revolution is therefore made possible only through the love of humanity and human liberation. In an unloving, dehumanized behaviorist society, it is love that is absent, and which is needed to become more human. Coming to this realization we must therefore unlearn oppressive ideologies.

Freire's approach therefore takes the never-ending process of reflection and action as a central project. Freire's revolution is not one of hierarchy where an elite vanguard leads the ignorant masses to freedom, but it is grounded within the conviction that a true revolution comes from an enlightened population endowed with the critical thinking skills needed to read both the word and the world. It is a model that demands the educator have confidence and trust in the people to think for themselves and act in democratic ways. It is an approach that is fundamentally opposed to all forms of paternalism and coddling. Like Kincheloe's postformalism, Freire's (1998) *Pedagogy of the Oppressed* is founded upon Descartes' insistence that good sense and reason are the characteristics most universally distributed throughout the species as a defining human trait or endowment.

Critical Pedagogy and Educational Psychology: The Re-emergence of Postformalism

In "Critical Pedagogy and the Knowledge Wars of the Twenty-First Century" (2008b) Kincheloe highlights the significance of contextual awareness for a critical pedagogy capable of posing a challenge to oppression and human suffering. That is, Kincheloe (2008b) points to the role of critical pedagogy as a tool to resist the unjust ways empires use knowledge to deceive and perpetuate a system of oppression and exploitation. Outlining the distressing aspects of the twenty-first century Kincheloe (2008b) observes

> We live in nasty and perilous times. Those of us who work in critical pedagogy cannot help but despair as we watch the U.S. and its Western collaborators instigate imperial wars for

geopolitical positioning and natural resources, and mega-corporations develop and spend billions of dollars to justify economic strategies that simply take money from the weakest and poorest peoples of the world and transfer them to the richest people in North America and Europe. (p. 1)

Obvious examples of what this looks like in practice at the level of education, of course, are ways schools in the United States teach a social studies of white supremacist manifest destiny that situates Western civilization and industrial capitalism as evidence of progress and Euro-supremacy and, simultaneously, positions Indigenous peoples in America, Africa, and elsewhere, as backwards, primitive, and lucky to be under the protective care of their natural superiors, even if these bosses do have an occasional genocidal mean streak. Unlike many critical pedagogues, however, Kincheloe has consistently positioned his approach as dialectically opposed not only to the political and economic indoctrination in the interest of colonization and domination, but to the dominant mechanistic form of educational psychology, which, ultimately, serves the same hegemonic functions. In this context Kincheloe (2008b) argues for a "form of social psychoanalysis that can repair the social unconsciousness of the West" (p. 5).

For this, Kincheloe's unique perspective is invaluable. That is, because education is founded upon psychology, a real, viable, critical challenge must address its underlying assumptions. What we find is that the behaviorist and mentalist forms of mechanistic educational psychology are in fact not based on the objective science they claim to be, but are part of the empires knowledge wars waged against everyone from the most vulnerable citizens in third world areas excluded from the global economy to privileged white middle-class folks in North America. In this case, the goal is to control people through classroom management and curriculum, and to convince the population that the world is naturally organized hierarchically or that certain cultures produce smarter, more intelligent people—these are verifiable lies, the empire deceptively presupposes are objective and thus neutral facts.

Mainstream educational psychology, to reiterate, is founded upon the presupposition that the mind and consciousness are knowable and measurable properties, and therefore controllable. Since around the beginning of the twentieth century neo-mechanicalists, such as Frederick Taylor, have argued that intelligence is not only measurable, but naturally hierarchical, rendering the elite few natural leaders. The mechanical worldview is based on the assumption that there are no non-material entities in the world rendering all that is real measurable. Because the mechanical philosophy behind this paradigm was disproved by Newton in the seventeenth century with his *action at a distance* discovery, which acknowledges that the force or cause of life is a non-material, immeasurable property, which is commonly referred to as free will/spirit/soul/consciousness, and therefore largely unknowable and mysterious, education, as a field of study or discipline, is grounded on antiquated ideas the scientific community long ago abandoned.

From the perspective of empire, however, there are no alternatives—in other words, the *bosses*, as it were, cannot admit to the true nature of reality. That is, a universe governed *not* by order and predictability, but one with an unchangeable and untamable spirit is not acceptable, even if science suggests it to be so.

Consequently, the empire must ignore science and work in the less than admirable domain of indoctrination and propaganda and pretend people are robots and the earth is a bottomless shopping mall, and the world will live happily ever after as long as we do not challenge or question the man behind the curtain. In this context Kincheloe's (2008b) critical pedagogy is absolutely transformative because it is firmly grounded in knowledge regarding the immeasurable free will that makes possible the human agency and consciousness that has created and recreated critical pedagogy. For example, challenging the "machine cosmology" of modernist educational psychology Kincheloe (2005) points to Indigneity as offering a more vibrant and spiritual ontology. Consider

> With the birth of modernism and the scientific revolution, many premodern, indigenous epistemologies, cosmologies and ontologies were lost, ridiculed by European modernists as primitive. While there is great diversity among premodern worldviews, there do seem to be some discernible patterns that distinguish them from modernist perspectives. In addition to developing meaningful systems that were connected to cosmological perspectives on the nature of creation, most premodernists saw nature and the world at large as living systems. (Kincheloe, 2005, p. 84)

Much of Kincheloe's critical work therefore transgresses the lifeless hierarchy of the dominant paradigm because it refuses to accept the existence of an exclusively material world that can be manipulated by naturally superior individuals (or *races*) with unwavering certainty. Because Kincheloe's critical, postformal (see Chapter 2) pedagogy is conscious of the *livingness* of all, that is, the reductionistic conception of teaching and learning as a technical transference of facts is firmly rejected in favor of the learner as mediated by

> . . . the various axes of power, identity, libido, rationality, and emotion. In this configuration the psychic is no longer separated from the sociopolitical realm; indeed, desire can be socially constructed and used by power wielders for destructive and oppressive outcomes. In contrast, critical theorists can help mobilize desire for progressive and emancipatory projects. (Kincheloe, 2008a, p. 52)

In other words, critical educators take the full human into consideration when constructing curriculum and pedagogy because it begins to account for the full complexity of the human being. That is, ideas can elicit strong emotional responses, especially new ideas that challenge the taken-for-granted, underlying worldviews that inform the cognitive schemas we use as interpretative frameworks to understand and act in the world. The idea of the robotic learner and mechanical world therefore *does not* and *has not* ever existed. However, capitalist schooling, as Kincheloe (2008b) demonstrates, assumes students are empty vessels waiting to be mechanically filled with content, the specificities almost always dependent upon the particular needs of business and the perpetuation of the basic structures of power. Rejecting the passivity of the mechanical paradigm, educators and students are free to unmask the biases built into what the ruling elite validate as legitimate data, again, a process based not on facts or the truth, but on political and economic interests. Kincheloe (2008b) names the theory underlying contemporary education as "crypto-positivistic" because it is an unstated bias presented as a non-perspective or *just the way it is*.

Why, we may ask, would educational policy makers, many of whom are glorified workers themselves, serve the interests of empire and engage their practice from outdated theories? The answer is simple enough. Most policy makers, it is safe to assume, have internalized the dominant paradigm so extensively, they believe the natural order of the world is hierarchical and the role of education is to save the ignorant masses from their own inferiority through a process of social control, that is, behaviorism. For hegemonic public intellectuals such as renowned journalist and Presidential advisor, Walter Lippmann, who did the majority of his work between the 1920s and 1940s, held a romantic conception of hierachical leadership. That is, Lippmann argued that while democracy is a very *good* idea, it is, unfortunately, an unrealistic idea because the masses do not possess the biological cognitive endowments to *ever* achieve the competence to make the important economic and political decisions that most centrally affect their lives, and no amount of education could change that. Lippmann therefore saw the role of the responsible men, the natural leaders with an unusually large intellectual endowment, as leading the government and economy on behalf of the masses, who, left to their own devices, would quickly resort back to their natural state of depravity. Consequently, policy makers, and the rest of us socialized within the same system, tend not to be aware, without rigorous self-reflection, that we see and act upon the world through an internalized, unconscious philosophy.

Because capitalist education is based more on indoctrination and control than on the legitimate quest for factual knowledge and the alleviation of human suffering, the terrain of education has historically represented a contested field or knowledge wars. That is, Kincheloe's (2008b) critical pedagogy or form of education designed to fight oppression and strengthen the democratic imperative, like critical pedagogy in general, is interested in increasing student critical consciousness through the development of analytical tools for reading the world and challenging unjust relationships such as white supremacist race relations and the capitalist relations of economic and social reproduction for something similar to what we might call, for lack of a term more pregnant with descriptive imagery, a *socialist* future.

Again, however, unlike many critical pedagogues, Kincheloe's (2008b) place of departure or primary target is not *fighting the dictators of capital outright*, but challenging the architects of capital's system of education—both foci, we should note, are equally important in these troubling times. Meeting these complex challenges, which requires highlighting the interconnectedness of the social and physical with the mental and non-material, requires mounting an effective critique of mainstream educational psychology and offering a viable alternative to capitalist hegemony. In his essay and throughout much, if not all, of his work, Kincheloe, in his own beautiful way, is able to achieve both goals.

Kincheloe has often attributed his relevance as a critical pedagogue, although stated in much humbler terms, to the tendency among Frankfurt School scholars operating in Germany and the United States during World War II to acknowledge the changing nature of capitalism, and therefore the changing nature of oppression. From this perspective, an effective critical pedagogy must too continuously adapt to a perpetually changing world. Rejecting the modern Western belief in one

true reality or paradigm, Kincheloe's post-modernism presupposes a highly complex social reality that produces many equally valid perspectives, not just between marginalized communities, but within them as well. This passion for complexity and different perspectives is the heart or the venom of Kincheloe's anti-imperialist pedagogy.

Why, one may query, would we point to the seemingly mild acknowledgment of the obvious existence of multiple perspectives as so potentially transformative? Precisely because it is a necessary safeguard against the paternalistic tendency of imperialism where the assumed natural leaders or responsible men speak *for* rather than *with*. In other words, Kincheloe suggests that if our critical pedagogy is to be anti-imperialist, it must not attempt to speak for those most oppressed by the ravages of imperialist war and capital, but should rather seek to form alliances and work in solidarity with one another for a more democratic future. Kincheloe then reminds us that in practice researchers must be aware of the power-inscribed nature of producing knowledge. To highlight this idea that multiple perspectives are indispensable in combating modern imperialism we will turn our attention to an example of the many ways social class and poverty are experienced, which demonstrates the democratic value of always striving for greater complexity and depth of understanding. While the following descriptions are useful for us here, they are still *my* interpretations of what was shared with me through discussion and experience.

In the highly techno-industrially developed United States the working class has a long history of struggle centered around collective bargaining as a method of holding onto more of the value produced through the exertion of one's labor power. Recently, the working class has been enraged over cut backs and downsizing in many industries, most notably the automobile industry and manufacturing in general. However, those relegated to the status of worker in the United States have also historically been unwilling to fully break with the system, regardless of their many legitimate grievances. These *first world* workers experience capitalism and class oppression vastly differently, from those in the so-called *third world*. The perspectives of third world peoples therefore become central to Kincheloe's democratic project because imperialism has always legitimated itself by excluding the voices and points of view of those most oppressed and abused. To demonstrate we will turn to a few recent examples from Jamaican.

Some Jamaican townships and communities suffer as high as 60–70% unemployment rates, especially in areas far removed from the hubs of tourism. People in these parishes often gaze to the United States, dreaming they too had the opportunity to more directly participate in the labor–capital relationship. For these folks the significance of the American working class is not that they suffer and are exploited for their labor power, as they often view themselves, but are privileged and ungrateful for what they have. However, we are not here to judge the accuracy of these sentiments; that happens through dialogue. We are simply affirming that it is a perspective that is held by real people in the Jamaican countryside.

At the same time, many economically excluded people in these rural areas remain strong supporters of Jamaica's former social democratic Prime Minister, Michael

Manley, who the United States covertly worked to remove from power during the 1970s because he sought to ensure that the wealth generated in Jamaica should benefit Jamaicans (Malott & Malott, 2008). Many of these folks are also unapologetic supporters of Fidel Castro and more recent socialist leaders such as Hugo Chavez of Venezuela—when you have little to no political power, which, in this world, is buying power, you are not as likely to say no to something or some power, especially *socialist* power. In my travels and engagements I found this socialist spirit of sharing and working together alive and well in rural Jamaica. For example, around the rocky points that speckle much of Jamaica's coastline congregate locale fisherman skillfully landing everything from barracudas to sharks with makeshift line and hook devices, who, at the end of the day, tend to share the catch so everyone leaves with either nothing or something.

At the same time, however, there exists differences between those who came of age during Manley's era of socialist promises and possibility for real justice, and today's generation coming of age in the computerized and cellularized twenty-first century. Many of Jamaica's youth appear to be intoxicated by the romantic dream of *America's* consumer culture and consequently less interested in the Indigenous knowledge of community building and of plants and farming and the sea and fishing. Reports of similar media-induced Westernization phenomena are emerging from all corners of the planet, from socialist Cuba to the American Indian reservations in the United States and Canada. The information age, marked by the World Wide Web, has not only been used counter-hegemonically, but it too serves hegemonic, imperialist interests, as it was created *by* that system *for* that system.

In rural corners of the Island, the youth crowd around computer screens viewing the romantic images of the good life in America embedded within its movies and music videos, and other highly fictitious cultural texts. As a result of this opulence in the face of their own poverty, an overwhelming vast majority of Jamaicans would leave the island if they could, according to recent poles. With neoliberal global capitalisms' flooding the first world with inexpensive commodities made possible by nearly eliminating the cost of labor, barrels of these products are flooding the Jamaican countryside as overseas relatives, endowed with their sense of community and sharing, are providing the physical material to support the youths' romantic images. That is, a pair of paints might be *fly* or *nice*, but they can tell the consumer nothing of the suffering that fueled their manifestation. But even if the pants could talk, and sometimes they do, the mantra of the twenty-first century has been *all for self, nothing for anyone else*; *fuck em*; *if you're not with us, you're against us*. In short, American corporate–military gangsterism has set the tone on the global stage.

These short examples highlight Kincheloe's emphasis on the need to know context, worldview, and their relationship. It also demonstrates the arrogance of Americans who think they know what is best for oppressed people in countries they know little to nothing about. White American critical educators, crippled by their own romantic images of third world revolution, have argued that Jamaicans who so desperately want to leave their country need to be told that it is not that easy in the United States and that they should stay and try and make it better there fighting the socialist fight against global capitalism. I find this sentiment highly troubling as

it assumes Westerners are better equipped to make decisions for those in impoverished and excluded countries than those who live that life everyday. It is problematic because it keeps in tact the paternalistic relationship of colonialism, although from a supposedly critical or revolutionary perspective.

Again, Kincheloe's (2008b) critical pedagogy cautions against this paternalism that refuses to listen because it assumes that poor people do not know what is best for them because of their assumed ignorance. If there is any truth to this, then it is equally true of Westerners. That is, we are all equally ignorant of some things and knowledgeable of some things. This is our democratic place of departure and part of the strength of Kincheloe's radically democratic project of unity.

Risking unnecessary repetition it is worth restating that Kincheloe (2008b) situates his critical pedagogical approach to knowledge production in the context of challenging the oppressive nature of the current hegemony—global, neoliberal capitalism that controls officially sanctioned information and ideas, and, as a result, manipulates what we might call *the public ontology*. Subverting what Kincheloe and others identify as the undemocratic and unjust nature of empire requires confronting the view of the world advanced by the institutions, such as schools and the mass media, that serve the interests of the elite, whose wealth comes not from their own toil, but from the unpaid labor hours of the vast majority. Kincheloe (2008b) here is sensitive to the ways the exploitative relationship between capitalists and labor are perpetuated by hegemonizing the ways people understand the world and themselves in it. Consequently, establishing a new, more democratic future requires the democratization of the knowledge production process.

Kincheloe's (2008b) critical pedagogy here clearly draws on the postmodern rejection of the idea that the world *consists of an objective reality that can be comprehended by the logical and predictable mind* because language and discourse shape the ways in which knowledge is constructed about the nature of existence and, ultimately, how relationships are understood and responded to. Marxists might therefore accuse such a focus as perpetuating a form of neo-idealism for overemphasizing language and discourse at the expense of *real* class struggle against the process of value production—in a word, capitalism.

However, without confronting the philosophies and worldviews embedded within all language usage and discourse, such as questions of the nature of human existence that inform notions of intelligence, which inform the construction and practice of education, for example, Marxists run the risk of advancing a sort of critical banking pedagogy as they argue for curriculum reform that engages students in developing their sociological imagination by imaging a world without capitalism, for example. Kincheloe's (2008b) radical epistemological and ontological inclusiveness not only appreciates such Marxist-informed insights, but also values perspectives coming from different experiences, such as the third world views from Jamaica outlined above. His work is therefore of extreme relevance here because it *hangs out in and learns from the epistemological bizarre*, paraphrasing Kincheloe's other writings. What is of most importance here, in Kincheloe's (2008b) critical contribution, is not *just* the critical pedagogy of the educator or teacher, but the experiential knowledge

of oppression and how to survive and fight it. This, of course, demands of the educator not only the courage speak, but the humility to listen and learn from those whose life experiences and worldviews are vastly divergent from your own.

Old School Paths from Behaviorism: Noam Chomsky and the Anarchist Challenge of Science

Reflecting on where to place the work of Noam Chomsky regarding psychology is no easy task. While his work on the mind is decidedly internalist, it is not mentalist, that is, it is not simplistic or focused on superficial sensory responses, such as Wundt (1902). While he does acknowledge the trigger or social context in which language and the mind are dependent upon to develop, even if only as a side note not fully explored, Chomsky is certainly *not* a behaviorist like Skinner (19) *or* a socio-historical psychologist such as Vygotsky (1962), Freire (2005), Macedo, Dendrinos, & Gounari (2003), Gee (1990/2008), Kincheloe (2005), and many others. While Piaget's internally developing and socially constructed conception of mind seeks to demonstrate the process of building up more and more powerful structures, forever expanding the *search space*, Chomsky's (2009) minimalist approach is concerned with narrowing the search space down to the initial internal abstraction or structure. Where Piaget avoided addressing the *force* or *cause* of the relatively uniform ways in which human beings development from infancy into adulthood, Chomsky's approach to linguistics takes it as his primary obsession.

Chomsky's minimalist approach to what he calls universal grammar is based on the rejection of the belief that language acquisition is the exclusive product of external stimuli and experience because children, at roughly the same age, learn to use language in complex ways that far exceed what they could have possibly learned suggesting that humans are naturally endowed with an internal language organ complete with grammar rules. For example, it has been speculated that a hypothetical child, in a normal language situation, hears a different type of sentence every second and must therefore choose from over one hundred grammar rules and to successfully decode them, the child would need hundreds and perhaps thousands of years in an unconstrained search space to learn these grammars. From this point of view it is therefore obvious that something internal *must be happening* (Chomsky, 2009).

As previously mentioned, Chomsky therefore harshly condemns the extreme environmentalism of Skinner and others' behaviorism for giving science a bad name by invoking its cultural capital yet without following the rigors of its methodologies. However, Chomsky's contributions reach far beyond his critiques of Skinner and mechanical psychology. Summarizing what Chomsky's philosophy looks like in practice, Chomsky biographer, Robert Barsky (2007), notes

> . . . as much as Chomsky tries to convince people that his views on some specific point or another are accurate, he does not prescribe a formula for appropriate behavior or accurate thinking beyond, say, paying attention and not succumbing to authority. What is interesting

about his belief in a recognizable and (eventually) knowable human nature is the concomitant effort everywhere apparent in his work beyond academia to postulate a set of cognitive tools, intrinsic to all humans, that can be employed to unleash our potential. (p. 10)

Barsky (2007) rightfully situates Chomsky's insights and theories regarding the mind and human nature (issues central to psychology) within the context of not only Enlightenment scientists, most notably Newton, but within his historical accounts of "past moments when concrete advances were made" when ordinary citizen-workers demonstrated their innate cognitive sophistication and developed and implemented serious programs based on shared governance. As a result of such achievements, such as the 1994 Zapatista uprising in Chiapas, Mexico, democracy is shown not to be a romantic, unrealistic, illusion because the average intelligence of the human species is very low, but, rather, the natural product of humanity's universal biological endowments—unmolested. Summarizing this point Barksy (2007) invokes another of Chomsky's fundamental influences, anarchy. Consider

> The spontaneity of anarchist uprisings is important because it suggests a natural accord between anarchy, actual human needs (when they are freely expressed), and the natural propensities of human beings for creativity and cooperation. (pp. 6–7)

What follows is therefore a discussion of Chomsky's contributions to our understanding of the mind and language and the ways it can inform and strengthen our critical, postformal approach to psychology. In other words, because postformalism seeks to understand "the world from as many vantage points as possible" (Kincheloe, 2005, p. 96), Chomsky's work here, as part of the puzzle, as it were, is invaluable.

A Unified Reading of Chomsky's Work

In our continued investigation of how Chomsky's work might inform our postformal approach to educational psychology, we would not be unwise to take as a place of departure those elements that directly relate to our educational task. However, because Chomsky himself tends to keep separate his *political* work (i.e., foreign policy and economic affairs, media manipulation, and anarchist social movements) from his scientific work (i.e., human nature, the mental aspects of the mind, and linguistics), his scholarship and practice tends to be treated as two distinct and separate disciplines or endeavors (the political and the scientific), we have purposefully taken a more thoroughly interconnected approach to these two supposedly separate domains throughout this volume. That is, as suggested by the above quote, we see the human need for the creative use of language, and consequently, labor, as suggesting that social arrangements most conducive to human freedom are those that most closely approximate human nature. This conclusion only provides more evidence and support for a postformal approach to educational psychology that is similarly interested in social justice a movement toward life after capital.

The Limitations of Chomsky's Western Science

While we cherish Chomsky's invaluable contributions, our postformal approach to educational psychology prevents us from entering into a monogamous relationship with any philosophy or scholar, however, brilliant and insightful they may be. Noam Chomsky is no exception. That is, in his response to Lycan's (2003) challenge of his conception of the mind Chomsky (2003) argues that "in post-Newtonian science" there is "no place" for spiritual conceptualizations of the mind or the soul as "indestructible," "immortal," or of "divine origin" (p. 259). The notion of *free will* or *consciousness*, which seems to operate like gravity as a force acting upon bodies at a distance or without physical contact, suggests an independent, non-material property and therefore non-quantifiable and thus unexplainable as a mechanical operation or as the result of external supernatural control. Focusing on the knowledge his scientific epistemology allows him to construct, Chomsky, and other respectable Western scientists who make an honest attempt to adhere to the norms of the scientific community such as honesty and disinterestedness (Malott, 2010a), has little to say about free will other than it seems to be associated with our apparent need to use language spontaneously and creatively, which our internal universal grammar allows us to decode instantly. Because of the central significance of the notion of free will to human agency and liberation, and therefore to postformalism, it would be wise to look for traditions of knowledge production outside the narrow parameters of Western science in our quest to advance a postformal educational psychology conducive to challenging today's neoliberal threat to a free and self-actualized humanity and Earth more generally, including all ecosystems and life forms. Highlighting this disconnection of science from the non-physical, science educator Ron Good (2005) observes that

> Following the Copernican-Galilean-Newtonian revolution in the seventeenth century, in which Earth was displaced from the center of all things and the universal nature of physical law was established, the next major scientific revolution/epistemological rupture occurred in 1859 with the publication of Darwin's On the Origin of Species. After Newton it was clear that nature (gravity) needed no assistance from supernatural forces to keep the planets and the stars going their various ways, and after Darwin it was just as clear that nature (natural selection) needed no assistance to maintain the evolution and extinction of species. (p. 7)

It is quite true that the empirical and literal focus of Western science is not equipped to engage properties that *could* be extra-material in nature, and therefore has reduced the ontological complexity of existence to what is directly observable and thus quantifiable or measurable. In other words, while Chomsky's Enlightenment, post-Newtonian science is neither behaviorist nor mentalist, but is a form of what we might refer to as *historically contextualized biological complexity*, which contributes to our critical, postformal educational psychology, it still alludes to a non-spiritual and thus mechanical world (however, complex and liberatory it may be).

However, the vast majority of humanity *does* consider spiritual matters to be very *real* and highly significant. In recent texts, such as Marcus Anthony's

(2008) *Integrated Intelligence: Classical and Contemporary Depictions of Mind and Intelligence and their Educational Implications*, argue that it is not unlikely that "the human mind and its innate intelligence" are not "confined to the brain," a position that stands in stark contrast to Western "contemporary mind science" (p. xi). Further situating the mechanistic tendencies of Western science within a global context, Anthony (2008) observes that "Western mainstream science is founded upon one of the few epistemologies which reject the idea of the integration of consciousness and intelligence with the cosmos" (p. 2).

Again, because postformalism values the traditions of knowledge production produced by diverse communities across thousands upon thousands of years, we enthusiastically explore spiritual conceptions of mind, especially those that are non-Western, and consider how they may contribute to our radical democratic choice. To highlight this critical position we briefly examine some of the ways a Buddhist psychology (Tashi Tsering, 2006) contributes to strengthening the liberatory potential of our postformal educational psychology. However, before we proceed it is worth noting that we chose to examine Buddhism rather than any other spiritual/religious tradition because of its reputation as particularly conducive to the goal of ending human suffering, the driving force of our critical, postformal educational psychology.

Buddhist Psychology

Buddhism, needless to say, is an ancient tradition that has not only survived the test of time, but has expanded globally. Because Buddhism is fundamentally pacifist and thus peaceful, no wars or crusades have ever been waged to further its cause. The diffusion of Buddhist principles and teachings to the West, for example, has therefore been the result not of coercion or compulsory indoctrination, but due to the merit of its underlying presuppositions or philosophy, outlined below.

An aspect of Buddhism, and eastern traditions more generally, that renders them particularly conducive to our postformalism, is that they tend not to separate religion and philosophy. Highlighting this point in an introductory format for teacher education students in the eighth edition of their widely read, *Philosophical Foundations of Education*, Howard Ozmon and Samuel Craver (2008) note that "unlike the Greeks, who tried to separate philosophy from religion, Indian and Chinese religions and philosophies often are intertwined, and religious doctrines are merged with philosophical views about the nature of the world and one's interaction with it" (p. 81). Again, this stands in stark contrast to Western traditions whose dichotomization of questions of religion from questions of science tends not to be presented by mainstream scientists as two equal sides or domains, but are rather presented hierarchically with the latter assuming a superior position.

However, the spiritual realm, which Buddhist scholars have interpreted to be that most subtle core essence of who we are, transcends physical emotions, language, and socially constructed/learned schemas or worldviews. This *extended mind*

(Anthony, 2008) might be called the soul, which, for Buddhists and others, survives the death of the physical body. Again, we might describe this as that mysterious entity, *free will* or *consciousness*, which, after more than 200 years of investigation, as noted above, science has been unable to explain beyond describing mechanistic functions of the central nervous system. Of particular significance for our critical pedagogy is the notion that when our *free will/spirit/creativity* is externally controlled, limited, and alienated from a meaningful community, we suffer both physically and psychologically. Buddhist psychologists, aware of this phenomenon, offer invaluable insights here.

For example, the Buddhist idea that the will or spirit develops over many lifetimes engaged in the material world makes education, the social studies in particular, a very personal and relevant experience. That is, the idea that the well-being of the soul is affected by the social material context of the present and past challenges teachers and students to include the actions of past generations as a central aspect of their conception of self. In other words, the experiences and actions of those who came before us have a direct effect on who we are today. Simultaneously, the choices, actions, and experiences of those who live in *the present* will unavoidably impact those who will come in the future. For example, what humans are doing to each other and other life forms in the Gulf of Mexico today will have a material and spiritual consequence for generations to come. This spiritual focus therefore challenges people to take responsibility for ensuring future generations do not suffer because of our greed today.

Contextualizing this view as central to a Buddhist psychology, Geshe Tashi Tsering (2006) compares it to Western psychoanalysis. If Western psychoanalysis identifies the source of human suffering as subjugated drives and desires that have occurred within the individuals' lifetime, a Buddhist psychoanalysis identifies a process of repression and resistance that can be traced over a multi-generation time span thereby significantly advancing the historical rigor of psychoanalysis. While Geshe Tashi Tsering's (2006) analysis critiques the Western approach, he is not dismissive, but rather, reaches out in solidarity commenting that "it is important that neither [Buddhist or Western] totally dismiss the science of the other" (p. 4). Because of the value to the construction of our critical, postformal educational psychology, we consider his remarks in some detail:

> Buddhism does not consider the root cause of our problems to be an external agent of this life, but rather an internal agent developed over many lifetimes—the habitual tendencies of our minds. Parenting and environment, of course, play a significant role in making us the people we are today, but Buddhism looks further.

> It seems to me that Western psychoanalysis is a bit like Western medicine in taking a symptoms-oriented approach, addressing specific complaints. Buddhism understands the various negative states of mind [attachment, anger, and ignorance] to be symptoms of a deeper malaise and tries to get to the root cause of the illness. The Buddhist approach is therefore more holistic. (p. 3)

We might therefore name our postformal, Buddhist psychology here a form of critical, spiritual psychoanalysis. The challenge is therefore to begin undoing the psychological and material structures that have been constructed for supporting

and advancing the Columbian project of colonialist plunder and genocidal warfare, today global, neoliberal capitalism, to develop spiritually healthy communities. Again, we must therefore break with the atrocities continuously committed against humanity and the earth since at least 1492, which requires us to also break with its continuation today by actively siding with justice whenever we can, in whatever we are doing. Here we are talking about education and are therefore choosing a critical postformal approach to a revolutionary educational psychology.

This vision has the potential to foster a praxis of democratic responsibility because it challenges teachers to become researchers collecting data and evidence for how education is unjust and how it could be more just or more in concert with the "Buddist canon," that is, "to help us relieve suffering and achieve happiness" (Tashi Tsering, 2006). It is this entity, this spiritual essence that must be nurtured like a flower and treated as the living thing it is, with respect and dignity, which contributes to the health and happiness of future generations. The goal of this education is not necessarily to transmit a predetermined set of facts designed to condition and mold, but to assist students in developing deeper understandings of self situated in a larger social, historical, spiritual context.

Of particular importance is the role of power, politics, and force in shaping the self and world. We might ask, how has colonization affected what goes on in schools? Rather than a real living being intimately connected to the past, present, and future, the behaviorist treats the person as a lifeless machine, an empty vessel to be objectively and efficiently filled with facts and the so-called *correct culture* that produces *intelligence*. A postformal educational psychology informed by Buddhist psychology is therefore dedicated to relieving suffering and achieving happiness and thus cognizant of the spiritual essence of *free will* giving way to an ontology, or conception of the world, that is interconnected across space *and* time.

Conclusion

Before we end this lengthy chapter, let us briefly summarize the reasoning behind our rejection of mechanistic approaches. According to mechanical philosophy the world is an objective machine that operates not according to the will of God or the independent life-force consciousness, but by the universal and deterministic laws of physics or adaptation. This approach has resulted in very shortsighted, profit-driven perspectives because it is so narrow in focus—mechanics does not consider the social or spiritual contexts. It has proven to be dangerously irresponsible. The hegemony is so complete, from an institutional perspective, that law even dictates that CEOs put the interests of the share holders and their corporations above all else, the public, the environment, and everything conceivable. As a result, the world's ecosystems, the life-giving structures and forces, are increasingly being threatened by the human drive to accumulate wealth through the naked plunder of a natural world viewed mechanistically as a vast network of natural resources. Reducing the world to its individual, and assumed to be controllable, components and therefore

ignoring a holistic view of the Earth as one large living entity, mechanical philosophy paved the way for industrial societies and the subsequent psychological misery of imbalance. In the remaining chapters I will therefore continue to both explore the postformal possibilities of a more balanced and socially and environmental just world and critique the behaviorist dominance of a lifeless and uninspiring physical mechanics.

Chapter 3
The Social Construction of the Dominant Psychological Paradigm: Columbus, Slavery, and the Discourses of Domination

Within this chapter we examine the ways in which ideas regarding educational psychology are reproduced by the dominant society through a process of educational and media indoctrination and propaganda. In the first section of this chapter we examine the role the colonization of the Americas and the trans-Atlantic slave trade played in establishing the current Euro-centric, pro-bosses hegemony and the subsequent racist/white supremacist social construction of psychological concepts such as *intelligence*.

The Colonial Legacy of Psychological Concepts

> There is one particular figure whose name looms large, and whose specter lingers, in indigenous discussions of encounters with the West: Christopher Columbus. . .. He has come to represent a huge legacy of suffering and destruction. Columbus "names" that legacy more than any other individual. He sets its modern time frame (500 years) and defines the outer limits of that legacy, that is, total destruction. (Tuhiwai Smith, 2005, p. 20)

From Smith's point of view we can locate the current socially constructed dominant psychological paradigm within the material and ideological legacy of Columbus, and the colonization of the Americas and Caribbean Basin more generally. In contrast to Smith (2005), who speaks from a critical and Indigenous point of view, from the perspective of the occupiers, the arrival of European colonizers in the Americas is viewed as *the great discovery* representing the *heroic adventurism* of crusading against infidels or, in the case of the Americas, the *unknown*, the *wild*, and *untamed* and is thus celebrated as representing not only a monumental advancement in social progress, but also the very essence of *human greatness* because, through Columbus, Christianity was fulfilling its global, apocalyptic destiny to serve *the common good*. However, the common good, in fifteenth and sixteenth century Christian Europe, was conceived as the return of Christ, which was commonly believed would not happen until the gospel was

> Spread throughout the entire world, and the entire world was not yet known [as the early Christians, informed by the ancient Greeks who themselves were informed by Egyptian

Africans, knew]. Spreading the gospel throughout the world meant acceptance of its mes-
sage by all the world's people, once they had been located—and that in turn meant the total
conversion or extermination of all non-Christians. (Stannard, 1992, p. 192)

A central tenet of these *imperialist ambitions*—ambitions cloaked in Christian
rhetoric—was Europe's ruling-class' sense of inherited, divine-right superiority,
which easily translated into a Euro-centric colonialist discourse and matching social
arrangements. From quite early on notions of cognitive deficiency and cultural
depravity served as paternalistic justifications for enslavement, displacement, or
extermination. The creation of this discourse can best be understood in the con-
text of the Europe that Columbus himself was fleeing. Rather than a culturally and
economically advanced continent, fifteenth century Europe was ravaged from dis-
ease and nearly bankrupt from years of costly and unsuccessful Holy Crusades in
the Middle East. The Columbian project was therefore not so much driven by an
Enlightened adventurism, as mainstream history books lead their readers to believe,
but rather, by a desperate search for wealth and anything of value. Reflecting on the
potential wealth that could be extracted from the local Arawak people Columbus, in
his own journal, notes

They . . . brought us parrots and balls of cotton and spears and many other things, which
they exchanged for the glass beads and hawks' bells. They willingly traded everything they
owned. . . They do not bear arms, and do not know them, for I showed them a sword, they
took it by the edge and cut themselves out of ignorance. . . They would make fine servants. . .
With fifty men we could subjugate them all and make them do whatever we want. (Quoted
in Zinn, 1995, p. 1)

Again, contrary to popular opinion that paints Columbus as a noble sea traveler
bringing civilization to the so-called *new world*, Columbus was ultimately inter-
ested in making contact with people and lands he could enslave, obtain gold from,
and whatever other sources of wealth that could be exploited. After concocting sto-
ries about vast tracks of gold to his Spanish investors, who guaranteed him 10% of
all appropriated value, Columbus had to fill the holds of his ships with *something*
of value. It is therefore not surprising that Columbus took hundreds of Indigenous
people to Europe to be enslaved, the majority of whom died in route or upon arrival.
After returning to the Caribbean, desperate for gold, Columbus ordered every capa-
ble man to pay the invaders a *gold tax* every week. Those who did not pay the
gold—the vast majority because there were no vast tracks of gold—were met with
brutal punishments such as cutting off hands and leaving the victims to bleed to
death.

When mineral veins *were* located, Indigenous men were forced to work in mines
under such horrendous conditions that most perished after only 3 or 4 months. The
miners were chained together and lowered into shafts more than 700 ft below the
surface for a week at a time with nothing more than a small bag of corn and the
toxic byproducts of mining. When a man died, of toxins or exhaustion, his head was
typically severed from the chains and his body left to rot while another *Indio* was
brought in as a replacement. If he survived his weeklong shift, he was often faced
with a brutal beating for not mining enough gold. Physically exhausted, beaten, and

bloodied, and as a final act of humiliation and conquest, the men, left shackled and helpless, were then often discarded under their own beds while Spaniards raped their wives directly above them. As the men were forced to work in mines, the women were made to toil in the fields to do the grueling job of erecting countless hills for cassava plants (Stannard, 1992).

Native peoples who attempted to flee or resist, as many did, were hunted down by the invaders' bloodhounds like animals and systematically butchered with an unrivaled barbarism. Even though this Arawak Native resistance proved tragically unsuccessful, it does seem to support the biologically based argument that systematic dehumanization will *always* foster discomfort within the individual and thus the potential for critical pedagogy. In other words, human psychology is genetically constructed for freedom. Another piece of evidence for humanity's internal need not to be externally commanded and abused resides in the report that suicide rates were high among the Arawak as death was too often chosen over the enslavement of Columbus and his murderous pedagogy of plunder. Mothers also routinely killed their newborn babies to save them from Spanish cruelty. Such reports refute the behaviorist assumption that people are nothing more than what they have been conditioned to be and can therefore be *molded* or conditioned into *anything*. Indigenous peoples also suffered catastrophic loss through the diseases brought from Europe. Consequently, within 21 years of Columbus' arrival in the Caribbean the once densely populated islands were desolate. Consequently, in an extraordinarily short amount of time millions of people perished as a result of violence, disease, or despair (Stannard, 1992).

While Christian rhetoric informed the mind and actions of Columbus, other psychological discourses began to be constructed by Europe's academic elite providing ongoing justifications for an imperialist practice that too was *ongoing*. Robert Venables (2004a), in his comprehensive, *American Indian History: Five Centuries of Conflict and Coexistence*, documents, in precise detail, the ways in which the Spanish enslavement of Indigenous peoples in the Caribbean Basin and South America sparked a passionate debate within Europe regarding the moral issues such horrific practices invoked. Situating this debate within a historical context Venables (2004a) explains as follows:

> In 1510, debates at the University of Paris led a professor from Scotland, John Major, to defend the Spanish enslavement of the Indians by calling upon ideas of Aristotle. All Europe was undergoing the intellectual ferment of the Renaissance, and Renaissance scholars like Major were fond of quoting the classics to defend their arguments. Aristotle had stated that some people were naturally inferior, intended to be the servants of their superiors, and Major saw the Indians in that subordinate role. His views illustrate how, less than twenty years after Columbus's voyage, many Europeans had already placed the Indians within a stereotype that suited their own purposes or opinions. (p. 5)

Despite such views held by what we might call *elite academic apologists*, Venables (2004a) argues that many *other* people in Europe, aware of what was happening in the Caribbean and viewing themselves as *moral* Christians, believed Indigenous peoples should be treated fairly. In other words, while the horrors of this shameful history should not be minimized or downplayed in any way, shape, or form,

not all Europeans supported the genocidal practices briefly mentioned above. The limitless brutality and greed of Columbus and his legacy not only catapulted Spain and other future European nation states into imperialist superpowers, but also contributed to the emergence of a European counter-hegemony—that is, a tradition of anti-imperialist resistance. Consequently, the Spanish Crown adopted official policies of *moral responsibility*, but still within the colonialist framework of wealth extraction, which requires physically controlling/dominating the productive capacity of the land and people. In other words, the Crown was saying, *yes, force Indians to work in the mines and fields, but you must be a good Christian and pay them a descent wage and don't massacre them.*

However, the Spanish colonial machine "was not a public or a national venture, but rather private enterprise licensed by the Crown. In order to attract private investment, the Crown ceded some of its moral control" (Venables, 2004a, p. 5). The ease through which the Crown allowed the savagery of profiteers to go unchecked, of course, is not at all surprising considering the fact that the Aristotelian justification—the content of the propaganda machine—had already been constructed to support the Crown's management and encouragement of the colonial system itself. Perhaps the greatest attraction for Spain to allow the most savage genocide in human history to be waged against entire civilizations, suggested above, was the massive amounts of wealth extracted through the dehumanizing process.

While the legacy of this history of genocide and the deficit thinking that sought to justify it are apparent and thriving (even in the twenty-first century), not all sixteenth century profiteers were unmoved by the above-mentioned crimes against humanity. Commenting on the bewildering atrocities he had witnessed, for example, and documented in his book, *History of the Indies*, Bartolomé de las Casas, Spanish missionary and former plantation owner gone staunch critic, offers a sobering account of what took place:

> ...Our work was to exasperate, ravage, kill, mangle and destroy... Thus husbands and wives were together only once every eight or ten months and when they met they were so exhausted and depressed on both sides ... they ceased to procreate. As for the newborn, they died early because their mothers, overworked and famished, had no milk to nurse them, and for this reason, while I was in Cuba, 7000 children died in three months. Some mothers even drowned their babies from sheer desperation. ... In this way, husbands died in the mines, wives died at work, and children died from lack of milk...and in a short time this land which was so great, so powerful and fertile...was depopulated. ... My eyes have seen these acts so foreign to human nature, and now I tremble as I write.... (Quoted in Zinn, 1995, p. 7)

The horrors that caused Bartolomé de las Casas to "tremble" as he documented them, which he had not only witnessed but, to some extent, been a willing accomplice, can only be understood as the logical consequence of a philosophy that views non-Christians as *uncivilized* and thus a part of nature, and nature a utilitarian thing whose sole function is to serve the narrowly defined material interests of *civilized man*—a social construct still within the framework of Aristotle's hierarchy and mainstream behaviorist psychology in the contemporary era.

Again, in addition to these ideas from antiquity, one of Christianity's central messages to be globally exported, and either excepted, or face the military capacity of the crusaders, was that the "pleasures" of the "flesh" are not only inherently "sinful," but "the very nature of humankind" and "nature itself" are "corrupt." It therefore followed that "only a rigid authoritarianism could be trusted to govern men and women who, since the fall of Adam and Eve, had been permanently poisoned with an inability to govern themselves in a fashion acceptable to God" (Stannard, 1992, p. 155). The idea that *man* is naturally evil is based on the dichotomy between the mind (things of the spirit, thought to be pure, and thus superior) and the body (things of the world, thought to be corrupt, and therefore inferior), the two of which exist in an antagonistic relationship where the barbaric and savage flesh wages constant war (i.e., sexual desire) on the sacredness of the soul. This hierarchical division between the mind/spirituality and the body/the material world continued to serve European profiteers as the labor of murdered Arawak people was replaced by enslaved Africans and indentured Europeans.

The practice of slavery throughout the Americas, and in the Caribbean Basin in particular, unfortunately, proved to be just as cruel as the atrocities committed against the Arawak. Exposing this history, for example, C.L.R. James (1963), in *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*, describes the process of transporting enslaved Africans in horrific detail:

> The slavers scoured the coasts of Guinea. . .They set. . .tribesman fighting each other with modern weapons. . .The propagandists of the time claimed that however cruel was the slave traffic, the African slave in America was happier than in his own African civilization. . .The slaves were collected in the interior, fastened one to the other in columns, loaded with heavy stones of 40 or 50 pounds in weight to prevent escape, and then marched. . .to the sea, sometimes hundreds of miles. . .On the ships the slaves were packed in the hold on galleries one above the other. . .The close proximity of so many naked human beings, their bruised and festering flesh, the fetid air, the prevailing dysentery, the accumulation of filth, turned these holds into a hell. . .The stranger in San Domingo was awakened by the cracks of the whip, the stifled cries, and the heavy groans of the Negroes who saw the sun rise only to curse it for its renewal of their labors and their pains. . .Worked like animals, the slaves were housed like animals. . . (pp. 6–10)

Given the shear magnitude of cruelty and brutality that was part and parcel of this system of wealth extraction resulting in the genocide of more than 60 million Africans, it is no wonder that resistance and insurrection became a central component of slave life, leading to many revolts and uprisings. To combat this culture *of* and tendency *toward* emancipatory movement, the slavers engaged in psychological warfare. That is, through the process of turning human beings into *slaves*, which is required with every new generation so it is ongoing, African knowledge and philosophy and the history of struggle and resistance were subjugated. Because capitalism depends on wage slaves, these practices continue to inform capitalist schooling and corporate media.

The practice of enslavement is therefore not just a material endeavor, but includes psychological indoctrination designed to teach Africans, and all other members of society, to hate everything African, including the African body, as inferior, savage,

and barbaric compared to the European body and model of Western civilization. The *purpose* was to control the enslaved African not just physically, but psychologically. As a result of this ongoing process, today many people, especially *black* people, believe that Africa is inferior, savage, and forever corrupt. W.E.B. DuBois (2001) argues that this painfully tragic self-hating conditioning—what we might call *psychological warfare*—successfully limits Black resistance because many black people learn to not value themselves and their African heritage, and thus willingly consent to the basic structures of Euro-centric power, and, ultimately, their own subjugation.

But this system involves much more than the mere subjugation of African knowledge and the history of resistance (of not only African workers, but all workers). It includes a process of divide and rule, which Malcolm X argued led to the creation of field slaves and house slaves. Field slaves were the vast majority of enslaved Africans who despised their Masters and the endless toil they were subjected to. This class of workers wanted nothing more than to see and contribute to the demise of slavers. The house slaves, on the other hand, were a small minority of relatively privileged individuals who resided in the Masters' house and dined on the Masters' food, although never with the Master. Rather than despise the Master, this class identified with Master, and therefore viewed their interests as one and the same with the Master. The job of the house slave was to keep the field slave in line and dissuade them from resistance, attempting to convince them how good they had it and how kind and just their Master was.

In *A Call to Action* (Malott, 2008) I refer to whiteness as part of the process of turning the whole of humanity into house slaves—the house slavification of humanity—because whiteness was created so poor, European peasants would identify more with their investor overlords rather than with African and other workers facing similar exploitation and abuse from profiteering European colonizers and slavers.

As the European conquest of the Americas continued to unfold and spread from the Caribbean to Northern North America to lands that would eventually become Canada and the United States, the moral paradox of self-proclaimed Christians engaged in violent wars of conquest and enslavement continued to deepen as new deficit theories were developed, which would eventually inform the emergence of psychology as a distinct discipline. Martha Menchaca (1997), for example, argues that between 1620 and 1870, whites in North America engaged in large-scale land theft, intentional genocide (i.e., wars of extermination) and unintentional genocide (i.e., the unknowing spread of deadly diseases), and enslaved and subjugated "racial minorities," all because it benefited them economically, which they justified by "promoting various discourses alleging the inferiority of non-whites" (p. 13).

For example, in 1620 the English Pilgrims began creating the first 13 colonies of what would be a future Haudenosaunee/Six Nations/Iroquois (Native American group who represent the oldest functioning confederation of nations in the world)-inspired confederation of nations, but nevertheless managed to establish an enduring foundation of white supremacy that would spread like cancer throughout the world.

While the Pilgrims were not enslavers per se, they *were* Euro-centric colonizers who believed they were *chosen*, and therefore *destined*, by God to *rescue* America from *the sinful paganism of the devil's dark races*. Because the Pilgrims were not interested in Native labor power, only Native land, the policy was to force Indigenous groups to relocate, using physical, genocidal force if necessary. Of course, the Pilgrims, fleeing a desperate and impoverished Europe, were rewarded with large, productive tracks of land for their cooperation in forcing Native peoples off their ancestral homelands. This horrific practice that often included massacring entire villages, and not just the men, but women, children, and the elderly as well. The colonizers socially constructed these practices as an unfortunate, but necessary and inevitable price for utopia. That is, the notion of a Euro-centric utopia or an ideal or perfect world for this group of Holy Pilgrims was a world with no *Indians* or other non-whites (including the Irish who were not considered to be white until the nineteenth century).

In her account of events Menchaca (1997) reminds us that the racism of the Pilgrims merely reflected the dominant discourse of elites and the scientific community in Europe. The stereotypes of the savage, cannibalistic, cognitively inferior, so-called *dark races* were constructed not only through academic discourse but through seventeenth and eighteenth century popular culture as well in many of the works by Shakespeare, Cervantes, and others. Pilgrims were therefore conditioned before coming to America to ensure that they would not deviate from their prescribed roles.

As the colonization of the Americas developed with the discourse of science, two primary theories emerged—monogenists and polygenists. Monogenists believed that the human species is only *one* species, as Darwin argued, because it is a mathematical impossibility for a single species to descend more than once—this continues to be the respected view of science. Polygenists, on the other hand, believe that only those deemed white are human, and that non-whites are of a different species or part human and part animal. Prominent among the polygenists were the pseudoscientific craniologists who argued that, "the races had different cranium sizes" proving that there existed a "hierarchy of superiority" (Menchaca, 1997, p. 18) with Europeans, of course, coming out on top. At one of its more absurd moments English elite, Lord Kames, a major supporter of craniology, argued that particular confusions surrounding the Bible concerning who is or is not human were due to the fact that some people speak non-human languages.

However, even though the single species theory continues to be the accepted theory in the scientific community, the monogenists were no less Euro-centric than the polygenists. That is, while the monogenists believed the human species to be just one species, their racism, like Darwin's, was cultural. Because they believed that Western civilization and their particular version of the Christian religion represented the most advanced cultural achievements of the human species, non-Europeans were viewed as culturally inferior. Unlike the biological determinism of the polygenists, who believed that Europe's nobility and ruling class elite represented the top of a fixed hierarchy, the monogenists, which included many Christian missionaries, believed that savages could be conditioned to be civilized and functioning members

of society. In practice, Native Americans and African-Americans, for example, were subjugated to assimilationist schooling designed to create low-level wage slaves. However, within this paternalistic colonialist paradigm, there were those Christian missionaries who believed that all people could become equal, democratically participating members of a non-exploitative Euro-centric Christian society, although these were received with far less fan fair by investors and those who would become the rulers of industry.

Alluding to the psychological warfare that is part and parcel of this European model of imperialist expansionism, in both its polygenist and monogenist manifestations, revolutionary psychologist, Franz Fanon (1963), in his widely influential, *The Wretched of the Earth*, comments that

> Colonialism is not satisfied merely with holding a people in its grip and emptying the native's brain of all form and content. By a kind of perverted logic, it turns to the past of the oppressed people, and distorts, disfigures, and destroys it. (p. 210)

We might observe that this form of ideological indoctrination is an early example of behaviorism for domination and cultural genocide. This destructive psychological process, for Native Americans, was carried out through a system of Boarding Schools. In practice, children, as young as 4 years, were physically removed from the love and cultural nurturance of their communities by *coercing* (violently if needed) families into allowing their children to be taken away to schools far from their communities and for years on end. Between the late 1800 s and the mid-1900 s more than half of all Native American children had been removed from their homes to be forced to act and think like white children and therefore become something *other* than what they formerly *were* through this *boarding school project*. This compulsory form of assimilation was put into practice in *the classroom* by indoctrinating Native children with a paradigm or worldview based on the idea that Western Civilization, the United States, and Canadian governments in particular, and white society in general, represented everything good and civilized and that *Indian* ways were shameful and savage. The *unhappy history* (colonization and genocide) of Indigenous peoples was rarely discussed, and if it was, it was to be contrasted with the superior future that is now within their grasp thanks to the generous gifts embedded within *Western, Christian, capitalist civilization* (Churchill, 2004).

In addition to manipulating the curriculum, Native American children were *conditioned* or *modified* by severely controlling their actions and very closely monitoring their *behavior*. The so-called *teachers* accomplished their objectives through a number of means: changing the children's dress and hairstyles from their individualized traditional tribal attire to institutionalized military-style uniforms; destroying all of the cultural materials they brought with them from their home communities, which was everything they brought with them from their home communities; banning all cultural practices and severely punishing *students* for engaging in their Indigenous cultures such as speaking their native tongues, even outside of *class*; and by only allowing English to be spoken while spending the majority of one's time toiling in boarding school factories (Churchill, 2004).

However, regardless of how harmful or destructive our behaviorist conditioning has been, the species, from a scientific point of view (Chsomky, 2002), always retains the ability, due to a biological endowment, to be self-reflective and thus become conscious of our own conditioned consciousness (Freire, 1998). Consequently, any critical or scientific analysis of behaviorist, dehumanizing colonization must highlight the ways the targeted victims have always fought back demonstrating the persistent, fixed, or biologically determined nature of the abstract notion of *free will*. For example, summarizing the frequency and ways Native American children fought back, Churchill (2004) notes

> Native children were not merely the passive victims of all that was being done to them. Virtually without exception, survivor narratives include accounts of subversion, both individual and collective, most commonly involving such activities as 'stealing' and/or foraging food, possessing other 'contraband,' persistence in the speaking of native languages and running away. In many—perhaps most—residential schools, such activities were so common and sustained as to comprise outright 'cultures of resistance.' (p. 51)

While this human propensity for counter-hegemony when faced with the persistent oppression of external coercion and degradation cannot be lost sight of because it is the essence of *revolutionary hope*, the larger purpose of a domesticating, dehumanizing behaviorist psychology is worth revisiting for *transformation* comes from the ashes and rubble of *deconstruction*.

The primary goal of replacing Indigenous cultures with the foreign settler *common* culture of domination/subjugation was therefore to transform the peoples' relationship to the land making them willing accomplices in their own oppression rendering the process of colonization (i.e., Westward Expansionism) that much easier for land speculators, investors, and European settlers willing, due to their own behaviorist, Euro-centric, Christian conditioning, to lift themselves out of poverty on wealth extracted from stolen Native lands, much of which (especially lands East of the Mississippi) had already been transformed for large-scale corn production by a multitude of Indigenous groups distinguished from one another by distinct languages, cultures, and so on.

To destroy the cultural connections between Indigenous communities and the productive lands on which they lived, Native children were to internalize the same white supremacy and support for the system that other people slated to be workers in the settler communities were to incorporate into their consciousnesses. The psychological implication for white people is to hate the other, while the implication for people of color, such as Native Americans, is to hate the self and those who taught them this self-destructive hatred. Consumed by their own guilt, however, many white people wind up hating themselves too. While white supremacy is obviously more harmful to people of color, white people would also be better served by a system based on a more positive, affirming psychology rather than the very negative tendency that exists.

To better understand this psychological process of domination, referring back to our discussion of Freud in Chapter 1, we can observe the connection between the many mental illnesses of so many people to the Boarding School project and to the model of schooling designed to produce passive workers. This is a challenge

because people are not naturally passive. Education must therefore suppress certain drives and desires, such as the free and creative use of language and labor power, to achieve some level of functioning consent. Consequently, workers are mentally sick and forever searching for ways to either rebel or escape the living hell of suppression—the product of a behaviorist social order.

The educational goal for Native children and the majority of Europeans and Africans brought to North America to be put to work for the investors was therefore to instill a fear of God, that is, the ruling authority, and a commitment to sacrifice and hard work because it would appease the fearful God and lead to salvation. While the schoolhouse was often used for Europeans and Native Americans, the classroom for Africans was more often the plantation. While white laborers, often flogged or whipped for falling victim to Satan, that is, showing any signs of free thinking, they were nevertheless born into the Western world and therefore tended not to possess worldviews that challenged the occupier's use and control of the land. This, in part, helps to explain the harsher measures the US and Canadian governments have taken against Native children reaching genocidal proportions. In other words, those raised in the settler communities were born and bred to be wage earners, to be externally controlled, which essentially, is to be a slave. Native American communities with an independent existence from the settler-states socialize themselves to be free and not externally commanded. The true goal of boarding schools was therefore to colonize the mind and enslave the body.

The goal of education for those deemed most suitable for manual labor (Native and African-Americans and the vast majority of whites) was designed to replace any previous conception of self with "worker." That is, to define oneself as a slave, a worker. If the only thing your identity is based on is being a worker, then you will feel incomplete if not working, or taking orders. This sense of dependency was and continues to be reinforced in the schools through a banking model of education where the teacher and/or the creators of curriculum are deemed to be the sole possessors of valuable knowledge and the students therefore as void of useful information and understandings. In this model education is something that is done to you—you go to school to *be* educated. In this context the students' success is measured by how well he/she can follow directions and regurgitate prepackaged knowledge (Freire, 1998).

The Social Construction of Psychological Concepts

Coming from within mainstream educational psychology, it is often argued that behaviorism is the first learning theory developed through *real* scientific methods breaking from previous efforts based solely on *philosophical speculation* and thus void of objective and rigorous testing. Invoking the authority of science provided the discourse of neutrality and thus the decontextualization of behaviorist methods of social control and assimilation from the highly politicized social context of enslavement, colonization, and an emergent industrial capitalism they are unavoidably situated in.

From the dominant, settler-state point of view it is therefore argued that behaviorism led the way for developing innovative and highly beneficial methods of describing, predicting, and controlling student learning (Boyanton, 2010). Again, because behaviorism is based on the presupposition that learning is a passive act, its method fits this social construction. As observed in Chapter 1, learning is much more than memorization. Behaviorists therefore celebrate what they believe are the laws of behavior, which is based on classical conditioning that argues certain stimuli always result in certain responses. Because humans are susceptible to external conditioning, behaviorists assume that people need to be conditioned to function. The question for behaviorists is therefore not *should* people be conditioned, but rather, *how* should they be conditioned, that is, conditioned to tend toward *what* dispositions and beliefs? These questions, however, are not presented as philosophically informed choices that support particular economic and political interests in behaviorist discourse because the colonialist model of assimilation and racial hierarchy are taken-for-granted presuppositions, or *just the way it is*.

We might therefore observe that the social universe of the behaviorist researcher is an *ontological hierarchy* that does not even realize it is advancing the colonialist legacy of Columbus, and then the Boarding Schools. That is, the universe, according to behaviorism, is organized hierarchically where the vast majority *need* to be told what to think and how to behave otherwise human civilization would resort back to its pre-Enlightened or pre-conditioned, stage of savage barbarism. This socially constructed world is paternalistic, Euro-centric, and pro-capitalist—that is, it operates in support of the basic structures of power, as I have so frequently mentioned within this volume. As we will observe below this behaviorist social construction has permeated the entire social universe of the Western world and beyond. Its assumptions and conclusions therefore comprise so much of the content of the *preconstructed* (see Chapter 3).

Chapter 4
The Social Construction of Educational Psychology (Continued): Implications for Teacher Education

This chapter brings the discussion from the previous chapter into more recent times. That is, the social construction of psychological concepts within the contemporary context is examined. After analyzing some of the larger implications of this hegemonic conditioning, a review of how teacher education students have internalized these constructs is explored. The final section examines the critical constructivism/postformalism of Kincheloe as a critical pedagogical approach to solving the problem of what we might refer to as the colonialist legacy of psychology situated within this neoliberal age of global capitalism.

> The *preconstructed* . . . is everywhere. This means that we see not so much what there is to see but more what we have come to see in the course of our past experiences . . . Engaging in research without knowing how our common ways of seeing the world mediate what we are perceiving and doing means that we no longer *know* in explicit ways what we are perceiving and doing—some learning scientists talk about the *tacit nature of knowing*. That is, our ways of knowing normally are hidden from view and therefore invisible. If we do not question ourselves and our ways of seeing, we merely record during our research what we already know implicitly rather than opening up ourselves to new learning. (Roth, 2007, pp. 56–66)

Throughout *Doing Teacher-Research: A Handbook for Perplexed Practitioners* Roth (2007) continues to stress the importance of being aware of the socially constructed schemas that mediate the knowledge production process of individuals rendering the notion of *objective science* absurd. This absurdity is particularly apparent given the white supremacist, *capitalism as historical inevitability* hegemony outlined in Chapter 2. Making this point relevant Roth (2007) reminds his audience, "the most dangerous enemy to a researcher are his or her own presuppositions (ideologies)" (p. 88). Because we are all exposed to roughly the same dominant cultural texts and messages through the mainstream, corporate-controlled media, as researchers and educators or teachers/researchers, we find consistent and predictable similarities between the schema of most people within a given society.

The dominant society, popular culture, Aristotelian-influenced conception of the human mind is that in a normally occurring situation not all minds are created equal. That is, it is assumed that intelligence or cognitive ability is unevenly distributed among the species accounting for the existence of social class. In other words, it is assumed that the rich are rich because of their superior intelligence and the poor

are poor because of their biologically determined deficiencies. It is therefore often assumed that students who come from poverty are carriers of inferior or substandard genes and/or culture.

It is also assumed that learning is a passive action occurring when a teacher successfully deposits predetermined and often prepackaged knowledge and facts within student minds. Because it appears that some minds are better at memorization, it is therefore assumed that some people are smarter or have more intelligence than others. What these constructions, presented as objective reality, suggest is that intelligence is a well-defined, and therefore measurable property. In reality, however, intelligence, like free will and consciousness, is an abstract concept, with no real material base from which to develop an instrument for measurement. What this discussion is beginning to expose is the content of the socially constructed nature of psychological reality within the current neoliberal context.

What science *has* been able to begin to identify are internal grammar and logic structures that seem to be common human traits throughout the species (exceptions being those cases of extreme pathology) (Chomsky, 1988; 2002) lending no weight or evidence to the hierarchy of intelligence thesis rampant within the popular, mainstream culture and within schooling practices such as ability-based tracking and sorting mechanisms.

To continue thinking about how the social construction of mainstream, white supremacist, pro-capitalist psychological reality gets reproduced in the contemporary era, we can start by reflecting on the notion of "news framing" identified by Rhoades (2008) as "the promotion or adoption of an intentional and cohesive narrative structure in news reports" and "presents a particular perspective on an issue, replete with a set of identified problems, solutions, and guilty parties" (p. 180). Again, this analytical framework for critically engaging with corporate news sources, especially, is particularly useful for understanding how our beliefs and ideas about society in general, and educational psychology in particular, are socially constructed. That is, educational psychology tends to be framed in a way that supports the policies and leadership practices of corporate power wielders. It helps us understand that even though the respected conclusions coming from the scientific community overwhelmingly tend not to support the hierarchy thesis, it remains the dominant conception animating the minds of millions with oppressive and self-destructive implications.

For example, the unstated operational definition of the prototypical intelligent person within fictionalized drama overwhelmingly tends to be white, male, Christian, heterosexual, slender, professionally dressed, and firmly situated within middle-class culture. Conversely, the unintelligent is almost always *not* middle class, including those that are poor, working class, black, brown, non-English as a first language, Muslim, not male, and not heterosexual. These messages, bombarding people's senses with an astonishing intensity and frequency, contribute to the social construction of a popular psychology that assumes intelligence is hieratically distributed as evidenced by consistent patterns of really smart people (i.e., civilized, advanced) and really stupid people (i.e., uncivilized, savage, primitive).

For policymakers to get away with forcing a domesticating education on the majority of students, the public has to have internalized this hierarchical model of intelligence and behaviorist psychology rendering such treatment to be warranted. Working class, immigrant, and students from other historically oppressed, colonized, and enslaved cultural or ethnic backgrounds and communities therefore continue to be portrayed, in various context-specific ways, as *criminal*, or *potentially criminal* and *depraved*, *out of control* and in need of external conditioning for *their own good* so they can *pass the standardized tests* and *compete on the global market for a livable wage*. This conditioning contributes to the formation of a working-class identity based on consenting to the labor–capital relationship as inevitable and good.

In this context educational psychology is framed, or socially constructed by the media, as calling for a *paternalistic gesture* made by the *benevolent leader* who *makes the hard decisions for the ignorant masses*, who, because of their *ignorance*, are *unable* to comprehend the rationalization behind the policies they are subjected to, so are angry at the bosses for *oppressing* them. *The boss, because he is wise and kind, continues his policies even though it renders him unfavorable among the ignorant masses for which he has so much love, so much* tough *love*. This is the social construction or framing of educational reality, which is informed by an implicit, built-in hierarchy. It becomes a presupposition. The hierarchy is therefore not even mentioned. It is taken for granted, just a normal and natural aspect of objective reality no more significant than the fact that the Earth is seasonal and therefore has a perpetually shifting environment. What amounts to *a biased* perspective therefore becomes a socially constructed reality and therefore invisible to the uncritical observer.

For example, Oxford University economist, Paul Collier (2008), reproduces the dominant, hierarchical approach to intelligence that legitimizes the West's control over the so-called third-world. Collier's (2008) work therefore reproduces the dominant argument that poor people, Indigenous communities in the *third world* in particular, are too stupid and lazy to manage their own affairs, and thus freely consent to the corporatization of their traditional agriculture-based economies. He goes on to argue that only romantic liberals support "peasant agriculture" because of their fetish for the organic as a "luxury brand." Making his paternalistic case Collier (2008) argues that because of sustained hunger third-world peasants' "mental potential is impaired," which, he argues, "can be handed down through the generations" (p. 70). In the end, Collier argues that *romantic elites* are hurting the third world's ability to feed themselves by preventing more commercial farming, which is assumed to be a benevolent gift from the intellectually superior class who have a natural inclination for entrepreneurship. Because this use of media is part of the way the world is socially constructed, it demonstrates the need for critical media literacy. In this age of neoliberal hierarchy that cloaks itself in paternalistic favors, an ability to deconstruct the interests and purpose of media messages is indispensable for students to be able to self-reflect on the ways their own consciousness and interpretive frameworks have been shaped by the content and practice of behaviorist conditioning.

The task is therefore to uncover the hegemonic veil that renders one unable to comprehend the philosophy behind the practice of modern, capitalist, Euro-centric practices, and perspectives. The process of dehegemonizing our minds, our schemas, which serve as a lens through which we construct and interpret knowledge and experiences, requires many interrelated conceptual tools and insights to reflect upon. This engagement with life-long critical learning and practicing might include discussion of the following analyses and observations:

- Challenging the assumption of an external objective reality that can neutrally be comprehended refocuses the debate from issues of *accuracy* to questioning *certainty*. While this shift may seem qualitatively insignificant, its ontological implications have immense pedagogical and curricular consequences. If knowledge exists outside the realm of human intervention, then *truth* can be absolutely known and externally imposed. However, critical constructivism argues that knowledge is socially constructed by historically contextualized knowers with particular relationships to dominate modes of power and authority.
- Invalid research conclusions and cultural biases built into reform language. For example 40% of students in Boston Public Schools are classified as "limited English proficiency," which, it has been argued, is based on a racist, paternalistic, savior pedagogy situated in the context where bilingual education has been all but banned. Seventy-five percent of linguistic-minority students reside in low-income urban areas. What impact has the changing demographics of the United States had on educational policy development? Many students whose first language is not English have developmentally critical language Needs that are being unmet. In Boston, for example, 40% of students have a first language other than English. Most of these students are placed in Sheltered English Immersion, a National trend due to NCLB setting annual test score goals that do not exclude learners who have Limited English Proficiency. Because bilingual education has been banned, students and parents interested in such programs need special waviers to be placed in bilingual programs, even though research suggests bilingual approaches are far more effective than immersion models.
- The political design that predetermines failure with 4 to 1 funding inequalities, for example, is ignored. "This is where urban school reform rhetoric has missed the mark. It has presumed that urban schools are broken. Urban schools are not broken; they are doing exactly what they are designed to do" (Duncan-Andrade & Morrell, 2008, p. 1).
- If knowledge is objective, then "Under performing" urban students and school districts—and *urban* here implies an association between criminality and blackness and brownness—are assumed to be objectively inferior (hierarchy of intelligence).
- Policy tends to reflect the imposition of external interests not validated within effected communities. For example, English-only laws in the United States are designed to phase out other languages and cultures, especially Spanish in the twenty-first century, which hegemony is designed to manufacture consent for. The result has been an increase in student resistance, social movements, but also passivity and a fear of freedom.

What Have Been the Implications of This Context?

The No Child Left Behind Act (NCLB) has not served the interests of school leaders, such as principals and superintendents, who maintain an interest in working as professionals, and less so the more critical they are. Transfers power over goals and outcomes of school from teachers and admin to federal government. Thus unconstitutional: Congress not intended to legislate education, that responsibility was left to individual states. Sanctions for missing AYP (Adequate Yearly Progress) target, measured through standardized, high-stakes testing. The loss of funds and control to private management corporation (i.e., Edison) as a result of NCLB sanctions has had a negative impact on curriculum and multicultural education. However, not even research supports testing and sanctions as adequate school improvement strategies. Critics have charged NCLB as being nothing more than a "backdoor maneuver" (Kohn, 2004, p. 84) allowing private for-profits to take over public education—paving the way for *market reform*. Profit in testing market: 50 million tests: Billion $ industry.

Thinking about the most current political context in the United States, let us turn our attention to US President Barack Obama and the approach to education his Secretary of Education, Arne Duncan, is offering.

- Race to the Top education policy, in significant ways, goes beyond NCLB in its support for a neoliberal, privatized model of education. For example, Race to the Top has adopted a model of funding based on competition. That is, schools eligible for federal funding (i.e., a grant) are those who raise academic standards, improve teacher quality, and expand the reach of Charter Schools. States who object to Charter Schools taking over public schooling therefore risk punitive measures. Of course, the policy argues that no political ideology or set of interests will be privileged or supported over others suggesting that a politically neutral lens will be employed to determine *what works*.
- Of particular concern to teachers' unions, such as the NEA, is the shift in determining a teachers' wage scale from credentials and seniority to performance. The NEA has argued this policy raises contractual and ethnical issues for their teachers. Duncan is reported to have responded by confirming the position of Obama's education policy, Race to the Top, which states that those districts that do not back its reforms, such as increasing access to charter schools, risk losing federal funding.
- Arne Duncan's pro-NCLB history while running the public school system in Chicago made him an obvious candidate for Obama's neoliberal administration. Apparently, unimportant to the Obama Administration was the displeasure Duncan's policy caused within many teachers. Angry Chicago educators protested that Duncan, "spent a lot of time using NCLB and test scores to close down quite a few public schools and turn them over to charters" (Malone & Sadovi, December 17, 2008).

Supporters of Charter Schools often cite the higher test scores and rates of college attendance among charter students compared to those at public schools as the

ultimate and all-important fact needed for endorsement. This exclusive focus on *outcomes* is informed by the position that knowledge is objective rendering higher test scores the only evidence or consideration needed when endorsing agendas for achieving higher test scores. What is therefore ignored are the social consequences of particular kinds of educational policies. That is, advocates of Charters do not question what students are learning about themselves and the world and why? Left unexamined is therefore the psychological damage done to students who are told everyday at school that their home culture and particular indigeneity is not only unimportant and unvaluable, but a barrier to self-worth according to the white supremacist values of the gatekeepers of the market/economy. Also uncommented on are the political interests served by, for example, particular historical constructions, such as Columbus discovered America, and in the process, brought civilization and advanced culture to the savage, primitiveness of Indigenous peoples. Postmodernists therefore right challenge the ruling class' use of notions of objectivity and neutrality as clever ways to conceal doctrinal systems of social control.

Despite Obama's obvious continuation of the policies and practices that support dominant forms of wealth and power, many white teacher education students continue to ask questions such as *historically whiteness has been a hegemonic construction of the ruling capitalist class, but with a newly elected black president, will this be true in 4 years, in 10 years, or in 20 years?* What these kinds of questions suggest is that the social construction of educational reality is so wrong that many people do not understand where power lies and how it is exercised. That is, while Obama, as the President, can propose legislation, his ideas are meaningless without the approval of Congress, a predominantly white male body long since bought out by corporate lobbyists.

What we are beginning to uncover here are the ways teacher education students have been conditioned to understand the world. That is, it provides a window into how future teachers tend to socially construct the world, which speaks to their media, schooling, and family experiences. What follows is therefore a discussion on student ideas, which is indispensable for the critical leader interested in engaging students from where they are coming from, as a place of critical departure—a central component of our postformal approach to educational psychology. However, before we engage this important discussion, we first briefly further explore the current context highlighted by the resurgence of the extreme, white supremacist, anti-Marxist, Christian fundamentalist, right wing.

Beyond Obama: Right, White, Wing Resurgence

While Obama clearly supports the interests of wealth and Euro-centric power, he has nevertheless been targeted as a *black symbol of anti-white power* by the so-called *Tea Party* (backed by powerful corporate interests), a conservative ploy designed to exploit the rising tide of white, unemployed anger. The Tea Party seems to be driven by the desire to make sure poor whites do not blame large multinational corporations, such as General Electric, General Motors,

British Petroleum, and many others, or the neoliberal trade policies of the World Bank and International Monetary Fund, as the capitalist source of their poverty and redundancy, but rather, Muslims, immigrants, and culturally depraved people of color. The argument is that terrorist cultures, such as Islam, are infiltrating American (i.e., Western) culture eroding the moral fabric leading to the current state of crisis experienced by the United States. The goal is therefore to recover American, Christian values invoking a nostalgic, romanticized view of the past.

Theoretically, this phenomenon represents a particularly ugly consequence of the Columbian legacy of white supremacy, which is the consistent resurgence of white-supremacist ideologies and political platforms during times when the collective bargaining power of the working class has been significantly reduced (Malott, 2008). It is therefore not surprising that in today's neoliberal context, continuing to look specifically at the United States, for example, ultra-conservative politics (i.e., the Tea Party) are gaining alarming momentum.

The goal of a postformal educational psychology is therefore to engage students in a critical reflection concerning the sickness of the social arrangements dominating the contemporary context paying particular attention to the ways we, as individual teachers, have been impacted from living in a sick society. Such reflections are designed to help teachers become more self-aware, and thus more effective and critically engaging educators or critical pedagogues. This approach is only going to become more important in the near future as the extreme right wing gains momentum and influence. These are scary and dangerously reactionary times. The practice of the critical, postformal educator is therefore endowed with a growing sense of responsibility as the crisis too intensifies. Challenging a dominant, popular discourse is not an easy task as the normalizing tendency is a strong force, as it exploits emotional responses.

Teacher Candidates and Their Social Construction of Educational Psychology

The social construction of educational psychological reality unavoidably includes ideas about not only individual intelligence and human nature, but also the possibilities and limitations regarding what a successful society *is* or *could be*. These narratives therefore inform constructions concerning society's historical development.

For example, after reading and discussing critical texts, and reflecting on the dominant Euro-centric view of the world, many white, Canadian students in the courses I taught during my 5 years in Buffalo at D'Youville College believed that *the British*, around the time of the American Revolutionary War and the War of 1812, *were more powerful than the local Huron, Ojibwa, and Iroquoian bands and were therefore overrun and now deserve to live on reserves*. Similarly, many of these white middle-class students from Ontario expressed, in subtle and not-so-subtle ways, that they believe that *since so many non-whites in their area are poor, they must all be drug dealers or gang members*.

What this suggests is that the old rigid dichotomy crudely portraying wealthy whites as pure and poor people of color, Native Americans in particular, as depraved, is, unfortunately, still very much alive. This reading of the world suggests a much deeper misunderstanding of historical events. For example, after the *new* emerging industrial capitalist ruling class of the original 13 colonies achieved their independence in 1776 through the American Revolutionary War, white Americans began pushing westward almost immediately. It has been argued that the Native American confederacy engineered by Tecumseh, the Shawnee leader of present-day Southern Ohio, and designed to retard this white encroachment on lands East of the Mississippi, the Old Northwest, as it was called, and allied with the British who supported a permanent sovereign Indian Nation as a buffer keeping American interests out of their Canadian investments, saved Canada as a nation separate from distinct from the United States (Foner, 2009; Venables, 2004b).

Consequently, to think that *Indians lost* is an accurate summary of all relevant historical facts is, at best, short-sighted, and at worst, apologetic for the deception, theft of land, and violence that were central tactics of the colonization process. However, this poor understanding of the complexity of historical events is what we would expect given the Euro-centric, pro-manifest destiny point of view within dominant society, north American history textbooks (Loewen, 1995; Malott, Waukau, & Waukau-Villagomez, 2009).

Many students, reflecting on the Euro-centric portrayal of Columbus they observe in schools, argue for a liberal, color-blind approach. Such arguments tend to critique teachers' lack of knowledge about Native Americans and historical accuracy making such comments as, *the teacher had nothing to add she literally read the lesson right out of the teacher guide attached to the meaningless lesson*. Reflecting on ways to start changing the curriculum so that is more inclusive many students will advocate for *throwing away material that is incorrect and clearly repressive* and replacing it with content that is *worthwhile to learn*. Students will continue demanding that *teachers be creative constructing their own ways to present material that is appropriate, accurate, and truly multicultural.* However, within these lines of reasoning students tend to quickly resort to the adoption of *we are all the same stances*, which, from a biological point of view is correct, but from a cultural point of view, which includes schemas and worldviews, and therefore is at the center of knowledge production, is incorrect and the cause for a lot of misunderstandings. Adopting this paradigm many white Canadian students have taken the superficial position that *Obama is just as human as the rest of us, so why shouldn't he be president?*

When challenged to begin developing interdisciplinary approaches to critical curriculum development, it is not uncommon for students as wonder if it is *necessary to congregate different ideas when teaching empirical subjects such as math and science because these subjects require one correct answer without explanation*. While this perspective represents the dominant paradigm of objectivity and is therefore widespread, other students were able to engage with critical texts and challenge their peers' reductionism frequently arguing that *in every instance critical analysis is employed, we can find progressive answers, thoughtful, positive change, and social justice as a result*.

Sometimes, however, students reject critical approaches outright. Many of these students come from religiously conservative backgrounds and believe that criticality and multiculturalism are a direct attack on themselves and white Christians in general by a growing minority population who has subverted political power in North America and is now taxing hardworking white Christians to fund their social welfare projects because they are too lazy to generate the funds honestly. This *pick yourself up by the bootstraps and quit attacking white Christians* discourse, because, *small government and free market capitalism*, after all, *does represent the most advanced stage of human civilization.* Ignored here are the systems' few minor flaws like a propensity for genocide and perpetual war, economic exploitation, environmental degradation, white supremacy, a bitter hatred for all that is not Western European, heterosexual, and male.

Behaviorism and Learning

Because most people in schools across the world have only ever been exposed to behaviorist teaching practices, many of our teacher education students' social construction of educational psychology is fundamentally behaviorist. It is therefore a thoroughly hegemonized presupposition that *appropriate classroom management involves techniques of Behaviorism*, but that *teachers must use behavioral conditioning methods accurately*. For example, when students sit quietly and listen to the teacher while she is giving instruction, the students are immediately rewarded by given a point that is put toward a prize. Behaviorism, the reasoning goes, does not guarantee that learning will occur—it should only be used to control behavior. Again, this behaviorist construction of educational reality is one of the most indoctrinated ideas regarding education permeating the entire dominant society. Many students adopt such decontextualized approaches to education defining learning as the acquisition of facts.

What we find is therefore a techno-mechanical conception of learning. That is, in this behaviorist paradigm learning occurs as a result of transmission. Consequently, the quantity of raw knowledge one has acquired is what determines a persons' worth, whether they are ignorant or enlightened. This point of view ignores the relational knowledge one cannot simply be told, but must be constructed through the practice of critical pedagogy. Learning is not just memorizing, but requires actively engaging with ideas and other people. Not being racist, according to a mechanical conception of learning, is therefore understood as the result of memorizing the right ideas. Studying, however, is only part of the process, and sometimes not even a required part. What *is* always required is interaction and practice living against racism in every domain of one's life. Sometimes students state this transmission conception of cognition even more plainly believing that *the school is a unique environment because it is the most important way of transferring information to young minds*.

Again, challenging the assumption that learning is a mechanical exercise of memorization is not easy—especially when the epistemological foundation of your education schema rests on the psychological banking concept. It is much easier for a future teacher to visualize how she/he will fit into the system as a teacher if teaching

is viewed as a technical act of depositing rather than a complex challenge of guiding students on an active process of construction, deconstruction, and reconstruction for liberation against the ongoing process of capitalism as colonialist plunder. For many people, this is scary, and it challenges everything they have learned about the world. If this were not enough, getting a new job and taking on new responsibilities, like the learning and growth of young minds, is also a very scary prospect.

We might therefore speculate that for some prospective teachers the rejection of critical pedagogy and MCE has a lot to do with coping and the attempt to get relaxed and not stressed out or overly anxious. These are real psychological processes and responses that critical pedagogy must be sensitive to. Also at play, and widely reported in the literature, is students' fear of being alienated from their families as a result of adopting the values of critical pedagogy, such as community and sharing. For many students the price is simply too high, which, from a psychological perspective, is understandable.

The Question of Student Growth

> My initial approach to learning was based on the Westernized methods that were typically used in the schools that I attended throughout my life... As a future Special Education teacher, I find that critical pedagogy will awaken my sense of creativity to hone in on practicing epistemologies that will offer choice, cultural relevance, individual meaning, and social justice. (Student 1)

> After completing this philosophy course, I have discovered the many social injustices that our world faces today... Before taking this course I severely underestimated the importance of our profession. I have now come to realize that teachers have a professional and social responsibility to help young people learn and promote social justice. Today, capitalism has become a crippling evil. Oppression, ignorance and racism are just a few examples of what this type of system has done to our societies. It is important for educators to educate our young about these real life issues and advocate changing to a socialist economy. (Student 2)

> My perception on the characteristics that embody a great teacher has incredibly changed this semester.... The Euro-centric way of teaching that our North American schools are very fond of might be a great barrier to how we teach our students. (Student 3)

> At the beginning of the semester I argued that a realist philosophy was valid in math and the pure sciences where ideas and hypotheses can be empirically tested and thus considered "right" or "wrong." Whereas the social studies were not so "cut and dry," a constructivist approach would prove beneficial as there were virtually no "absolute" truths. However, at the end of the semester, I argued that math and the pure sciences were in fact subjective studies, where "knowledge" has been defined according to the dominant paradigm. A comprehensive study of critical pedagogy effectively paved the way for constructivism to emerge from the confines of the social studies classroom. (Student 4)

These *testimonials*, if you will, are representative of the comments I, and countless other critical pedagogues throughout much of the world, receive every semester. That is, the vast majority of students in our classes, after reviewing and discussing multiple perspectives and evidence, consistently acknowledge that there are many critical approaches to education that do far better jobs of staying true to our most cherished democratic values than does the decontextualized banking model that continues to dominate public education. Not only do many future teachers develop sophisticated and complex knowledge systems to better understand and make sense

of the world, they also frequently display great humility, courage, and dignity as they commit to developing critical pedagogies because they believe that students have a right to the best possible education, even though such an education happens to be counter-hegemonic.

While it is true that any *student*, who can decode a critical text, can regurgitate ideas and make radical statements and declarations of allegiance and commitment, it is, nevertheless, for many, *a first step*. Even if students do not fully understand, or *believe*, what they are saying, and even if they are just trying to tell the teacher or professor what they think she/he wants to hear to get a good grade, they have at least engaged with critical perspectives, and therefore are more inclined to continue reflecting on the merits of the critical tradition than if they had never constructed such declarations.

As critical pedagogues, I therefore do not believe it is our task to police the *authenticity* of student comments, but rather, to create spaces for such statements to be made and reflected upon. If we spend our energy attempting to control student behavior and punishing them for not being *as authentic as we think we are*, then we will have failed to act democratically, and we will continue to blame students for their resistance and stubborn grip on their antiquated beliefs. When we *do* fall victim of *critical banking*, as I have referred to it elsewhere, we teach students that critical pedagogy is just another dogma externally imposed upon them from another set of behaviorists-in-denial. Unfortunately, this contradiction is often enough to turn students off to the critical tradition entirely. Our task, as critical pedagogical leaders, is therefore to demonstrate our own excitement and conviction for our democratic values, and the evidence that supports our conclusions, and to treat student comments as if they were genuine even if we know they are not. In so doing we are providing yet another opportunity for students to reflect on the validity and usefulness of the critical tradition, rather than locking them into their conditioning, which, given the necessary amount of time and guidance, they will become conscious of. This awareness is central to seeing the world through non-biased eyes. Obtaining this skill is central to understanding Eisner's (1998) observation that larger "since the early 1980 s (and earlier), there has been widespread concern about the quality of public schools" (p. 118). The following two excerpts speak to this analysis:

> Urban schools are producing academic failure at alarming rates ... inside a systematic structural design that essentially predetermines their failure. This is where urban school reform rhetoric has missed the mark. It has presumed that urban schools are broken. Urban schools are not broken; they are doing exactly what they are designed to do. A social justice approach shifts the blame from the victims of an unjust system onto the fiscal, political, and ideological policies that deliberately undercut and demean urban schools. (Duncan-Andrade & Morrell, 2008, p. 1)

> The wealthiest U.S. public schools spend at least 10 times more than the poorest schools—ranging from over $30,000 per pupil at the wealthy schools to only $3000 at the poorest. (Darling-Hammond, 2004, p. 6)

The Mind and Critical Pedagogy: Looking at Kincheloe

One of the most powerful bodies of work making significant contributions to exposing the social construction of educational reality are the 60 books and hundreds of

chapters and journal articles written by Joe Kincheloe. Not only is Kincheloe's peda-gogy contextualized within the larger structures of power that teaching and learning are always situated in, but it is also contextualized within the individual spirit of each individual learner/teacher. In other words, Kincheloe understood that educa-tion is not merely a technical or mechanical act between *depositors* and *deposittees*. But rather, in its most sophisticated manifestations, education is a full-body libidinal experience filled with emotion as the *spirit-ness* of the *free will* dances and experi-ments with the body's senses and biological endowments dialectically engaged with the larger social context and its own social conditioning. Summarizing this point in their text outlining the *postformal basics*, P. L. Thomas and Joe Kincheloe (2006) note that their postformalism is intended to foster "an intoxicating cognition that repositions our relationship to the world and other people" (p. 14). The authors go on to argue that through the practice of education and the critical engagement with texts that "we can use the magic of words to move human beings to a new cognitive frontier" (p. 14).

It is this focus on contextualization that runs throughout Kincheloe's philosophy of education. It is the hyper-*de*contextualization of schools and curricula that the need for a contextualized approach becomes evident. It is the attempt to argue that knowledge is neutral and objective that prevents policymakers from stating (or being aware of) the real goal of this kind of education, that is, "to perpetuate the domi-nance of 'mainstream' culture—white supremacy, Christian ascendancy, patriarchal hegemony, class elitism, heteronormativity, and so on" (Kincheloe, Hayes, Rose, & Anderson, 2006, p. xxx). When schools are organized in ways that reduce teaching and learning to technical and mechanical acts, as noted above, but validate knowl-edge produced from the perspective of the dominant culture as objective truth and therefore treated as a non-perspective, the vast array of religious, ethnic/cultural, linguistic, immigrant, social class epistemologies are belittled as wrong or infe-rior. Lost is the contextualized understanding that "learning cannot be separated from an individual's identity" and the social, historical, political context in which it exists (Kincheloe, Hayes, Rose, & Anderson, 2006, p. xxix). Kincheloe's criti-cal pedagogy/constructivism is therefore based on challenging the false hierarchy of intelligence dominant within mainstream schooling in favor of a contextualized approach to learning that celebrates epistemological diversity as counter-hegemonic and transformative.

Because Kincheloe's critical approach to education is complex enough to untan-gle/teach against the vast contradictions and *dark/curious hegemonic alliances* between the oppressed and the oppressors that are part and parcel of the coloniza-tion/hegemonization process (see Kincheloe, 2005, 2008; Malott, 2008), it deserves much celebration and reflection. Our first clue is that it embraces diverse ways of knowing allowing educators and students to "hang out in the epistemological bazaar listening to and picking up on articulations of subjugated knowledges" (Kincheloe, 2005, p. 127) excluded by Western reductionism (Kincheloe, 2001, 2005, 2008). That is, if knowledge production is going to serve the interests of democracy, then

the experiences and insights from those most oppressed become invaluable for understanding and transforming unjust social structures and institutions.

This insight is particularly important from a critical constructivist (Kincheloe, 2005) perspective because the act of learning or acquiring knowledge here is understood *not* to be the passive and objective transmission of predetermined *facts* that occurs when we "detach" the "mind from the senses," as Descartes (1637/1994) argued was possible, which lead him to believe that he was able to "abstract my mind from the contemplation of [sensible or] imaginable objects, and apply it to those which, as disengaged from all matter, are purely intelligible" (p. 103). Challenging this Cartesian idea that the mind and the production of knowledge can be disconnected from the social context of "corporeal objects," Kincheloe (2005) has observed that because humans are inherently social beings, everything we do, including learning, occurs in the highly political terrain of society—*the mind and society* can no more be disconnected from one another than can *the mind and the body*. Learning is therefore never objective or vacuous and can thus be described as an active process of creation that is unavoidably and always situated in a social–political context.

Because the mind is designed to socially develop *schema* for the production of thought—schema that are not predetermined, and therefore always subject to change—the process of becoming conscious of the content of our schema is of extreme importance. That is, for critical constructivism and critical pedagogy (Kincheloe, 2004, 2005) self-awareness is indispensable. For example, if we are not aware that we have been indoctrinated with self-destructive schema and thus are not aware that we are acting self-destructively, we cannot be expected to independently alter our behavior. The normalized and naturalized, that is, hegemonized, belief that everything assumed to be non-white, Western, and European is inferior or savage has a direct consequence of producing self-destructive knowledge and perpetuating the practice of oppression.

That is, when we dehegemonize our schema through the never-ending process of critical self-reflection and action (Freire, 2005; Kincheloe, 2005), we pave the way for dehegemonizing the knowledge we produce. For example, when the Euro-centric history curriculum is reformed and the central roots of Western science are accurately understood as essentially African, the production of anti-black knowledge and practices face severe challenges. We can describe this as social justice scholarship, which is the choice of critical pedagogy because it serves the best interests of humanity—and we conclude that it is in the best interest of humanity to be united around democratic principles, such as an appreciation of diverse epistemologies, paving the way for universal self-actualization.

This conclusion stems from our rejection of the myth of natural hierarchy, which is based on the assumption that the establishment of social equality can only ever be an attack on freedom because it prevents the naturally superior individuals or groups, however conceived, to rise to their predetermined state of domination. Consequently, teachers' loyalties, critically conceived, should be to the communities they serve, based not on one of Descartes' (1637/1994) hierarchies or paternalism,

but on one of his positive contributions, that is, that "good sense is, of all things among men, the most equally distributed" (p. 3). Kincheloe's (2004) postformal cognitive theory, mentioned above, is based on a similar conclusion that "most students who don't suffer from brain disorders or severe emotional problems can (and do) engage in higher-order thinking" (p. 19) in their daily lives, not necessarily at school.

Again, the danger of Cartesian reductionism in education is the tendency to disconnect the production of knowledge from the social–political context in which it is situated. Conceiving the world as chopped up into areas of study or disciplines is another fundamental feature of Western reductionistic and thus decontextualized education. Ignoring the political implications of the scientific method of knowledge production informing industrialism, for example, has been catastrophic. Reducing humans, geography, and all forms of life to their wealth generating potential through the disinterested science of capital is the result of the mechanistic and thus utilitarian view of the body after it has been disconnected from the soul or the mind. Summarizing this "machine cosmology" (Kincheloe, 2005) Descartes (1637/1994) theorizes as follows:

> If the body of man be considered as a kind of machine, so made up and composed of bones, nerves, muscles, veins, blood, and skin, that although there were in it no mind, it would still exhibit the same motions which it at present manifests involuntarily, and therefore without the aid of the mind [and simply by the dispositions of its organs]." (p. 126)

Rejecting this dichotomy, Kincheloe's vast body of work provides a unified, interdisciplinary approach to the production of knowledge and conceptualization of the world and all that it encompasses. Transgressing the narrow epistemological borders of the dominant, Euro-centric paradigm Kincheloe's critical pedagogy/constructivism rejects the notion that knowledge is objective existing independent of the mind. This is where most self-proclaimed revolutionaries miss the mark. That is, in an act of critical banking, many fail to transgress dominant assumptions of learning only replacing the content or substance to be transmitted or indoctrinated. Kincheloe's consistent emphasis on identity and self-reflection can therefore not be overstated.

Critical constructivist educators are consequently "concerned with the processes through which certain information becomes validated knowledge" as well as "the processes through which certain information was not deemed to be worthy or validated knowledge" (Kincheloe, 2005, p. 3). Again, from this critical pedagogical perspective, the goal "is not to transmit a body of validated truths to students for memorization," but rather, "engaging students in the knowledge production process" (Kincheloe, 2005, p. 3). Teachers who are successful at this show a great capacity to create the conditions where students can spark their own epistemological curiosities (Freire, 2005) which tend to be marked by the creation of a classroom "where students' personal experience intersects with academic knowledges" (Kincheloe, 2005, p. 4). Kincheloe (2005) offers some insight into what this might look like

in practice noting that "in their search for ways to produce democratic and evocative knowledges, critical constructivists become detectives of new ways of seeing and constructing the world" (p. 4). Put another way, critical scholars, dedicated to not only understanding the world, but contributing to uplifting its democratic imperatives, tend to be perpetually searching for new interpretative frameworks (philosophies) or "ways of seeing" that can better serve these ends—hence, the *epistemological bazaar* (Kincheloe, 2005).

Rather than viewing content as an entity that can be objectively known, the critical constructivism of Joe Kincheloe (2001, 2004, 2005) points to the ways in which power works to shape our understanding of *the facts*, that is, knowledge about ourselves in relationship with others and the rest of the material world. Language or discourse, from this paradigm, does not merely reflect *material reality* or *the truth*, but informs our actions *in* and *on* the world. For example, the knowledge constructed about the world, and the subsequent practice in that world, from the perspective of the oppressed, is going to be antagonistically related to the ideologies constructed by the oppressors. From here we can begin to understand why a ruling class would seek to restrict the meaning of language through propaganda. The complexity of the contemporary era can therefore be understood as the product of the experience and practice of subjugation and oppression and the attempts to foster false consciousness within the oppressed populations through media outlets and schooling institutions, and the many ways in which people assert their own humanity despite tremendous odds.

Kincheloe (2005) argues that Western bias is representative of a larger tendency within modern science noting that, "with the birth of modernism and the scientific revolution, many premodern, Indigenous epistemologies, cosmologies, and ontologies were lost, ridiculed by European modernists as primitive" (p. 84) because dominance, the hallmark of modern European civilization, was equated with superiority. In other words, because indigeneity tends not to view nature and the world reductionistically and mechanistically, but as interconnected living systems, during the period of American and African colonization, for example, they were discursively reduced to an inferior status by the colonizing European forces.

Ironically, contemporary Western scientists are beginning to look at the wisdom of Indigenous peoples and therefore attempting to finally catch up to their advanced level of scientific/philosophical sophistication. These subjugated knowledges are the substance of Kincheloe's epistemological bazaar. They are the gifts that dominant society schools are designed to hide. Through his vast body of work, which includes 60 books and hundreds of articles and chapters, Kincheloe ceremoniously offers his audience many windows of perception to view the paradigm shifting nature of this *bazaar*. Elaborating on this point of view Kincheloe (2005) makes the following observation:

> The advantage of subjugated perspectives, the view from below, has been termed the *double consciousness* of the oppressed. If they are to survive, subjugated groups develop an understanding of those who control them; at the same time they are cognizant of the everyday mechanisms of oppression" and how they shape their consciousness. (p. 144)

Conclusion

The social construction of educational reality, as argued above, has had, and continues to have, grossly unjust and domesticating consequences on humanity, especially among those traditionally oppressed groups such as Chicanas/os, African-Americans, and Native Americans. Transgressing the limits of mechanical philosophy and its hierarchical assumptions Kincheloe's scholarship, as previously suggested, is invaluable. As you engage the remainder of the book continues to reflect upon the ways in which Kincheloe's postformalism might inform your own developing understanding of teaching and learning. In addition, engage with these ideas actively always searching for ways to increase the critical rigor and transformative potential of our evolving discipline and approach to postformal educational psychology.

Part II
Postformal Psychology and Critical Pedagogy

Chapter 5
What Is Postformal Psychology? Toward a Theory of Critical Complexity

To understand the multiple ways, educational psychology has and continues to inform capitalist society, an approach to the discipline that goes beyond mechanical technicism is required. That is, an approach to psychology that does not exist beyond experiments and controlled responses fails to be cognizant of the interconnected ways economic and political structures, in fundamental ways, are responsible for setting the laboratory agenda. To begin understanding the connection between learning theories and the ideological platform of ruling classes, we need a theory that embraces the complex and contradictory ways in which dominant forms of power shape notions about the nature of human learning, what intelligence is, and who has, and who does not have, good sense and reason—these lines of inquiry demand a full engagement with critical theory as a conceptual framework that allows one to analyze the ways in which the collective power of groups of people work with and against each other to shape history and the values informing it. This approach allows us the intellectual freedom to connect current behaviorist approaches to educational policy (i.e., NCLB) to the type of thinkers and learners required by corporate interests—who have an increasingly dominant voice in these formerly public institutions thanks to the deregulatory impulse of the neoliberal project.

In this chapter we explore in greater detail the implications of a conceptualization of mind opposed to the reductionism of biological determinism, social determinism, and religious fundamentalism. As indicated by this chapter's title, our vision is for an understanding of human cognition that contributes to the movement against all forms of oppression, coercion, abuse, and the boss' decontexualized, hyper-reduced science for capital, which fundamentally opposes the democratic spirit of the scientific mind (Malott, Waukau, & Waukau-Villagomez, 2009). What follows is therefore a detailed exploration into Kincheloe and others' transgressive visions of cognitive being through what Kincheloe termed postformalism. After laying out this theoretical framework, I put it to work re-critiquing and re-analyzing the dominant paradigm in the twenty-first century outlining *who* or *what* forces are influencing it and *how* it is informing conceptualizations of cognitive reality, and, in turn, impacting the socio-economic interests being served by formalized schooling.

Postformalism: A Critical Pedagogy for Educational Psychology

Kincheloe began developing his postformal approach to educational psychology during the late 1980s. In 1991, with the publication of *Teachers as Researchers: Qualitative Inquiry as a Path to Empowerment*, Kincheloe situates postformalism within the critical theoretical tradition as part of the challenge against a mutating global capitalist system situated within *the postmodern condition*. Presenting it as a challenge to the reductionistic impulse of Newtonian science, Kincheloe (2005), nevertheless, argues that throwing "everything associated Cartesian-Newtonian-Baconian ways of seeing" would be "absurd" (p. 158). Rather, Kincheloe (2005) advocates for a more active engagement with Western science where it is simultaneously critiqued *and* celebrated. Reflecting on this critically contextualized focus in his work, Kincheloe, in the context of a twenty-first century postformal approach to the writing curriculum, notes

> I have written at length on the recovery movements of the last 35 years in U.S. and other Western societies . . . Frightened by the 1960s anti-colonial movements sweeping the world and domestic racial, gender, anti-war efforts, right-wing politicos in the U.S. developed a set of strategies to recover what was perceived to have been lost by heterosexual, white, Christian, upper-middle class males in the process. Understanding the way in which a relatively small minority of educators were engaging schools in the worldwide liberation movements' quest for justice, right wing tacticians developed a wide-ranging set of strategies to "take back" the schools. Such a move was designed to make sure that curricula that presented a wide range of perspectives from around the world never again be allowed in schools. (Thomas & Kincheloe, 2006, p. 3)

Kincheloe's postformalism, made evident here, cannot be separated or disconnected from his critical pedagogy—it is part of a larger, theoretical whole. We might even say that it *is* his critical pedagogy. In other words, because Kincheloe's postformalism is a direct challenge to the dominant paradigm that separates the mind and cognition from the socio-political context in which they are always unavoidably situated, his approach to educational psychology is just as much a sociology for social justice as it is a *learning* theory, traditionally conceived. Consequently, postformalism's theoretical place of departure, like critical theory more generally, is this critique and analysis of what we might call *ruling-class psychology* and its reproductive role of dominant society (i.e., class power and privilege).

A Critique of Dominant Society

Before exploring the specific context of educational psychology, it is important, from a postformal perspective, to consider the larger context of psychology and the vast impact it has on the reproduction of the basic structures of power more generally. Anarchist social psychologist, Dennis Fox (2004), reminds his readers that, in the Western world alone, there are thousands upon thousands of psychologists working everyday with hundreds of thousands of "individual and institutional clients,

students, research subjects, mental institution inmates, prisoners, etc." from primarily decontextualized "clinical individualist" (p. 4) points of view thereby ignoring the larger structures of historically developing capitalist, white-supremacist, patriarchial, heteronormative power that has a tremendous influence on the developing child. Mainstream psychologists therefore locate the source of people's psychological maladies as the result of a deficiency within the individual or the individual's immediate family unit, but rarely within the structure of an oppressive, dehumanizing society. Summarizing the hegemonic influence of what we might call the boss' psychology for social control, Fox (2004) comments.

> The problem with mainstream psychology isn't only its direct effect on its subjects/clients/students, but its participation in maintaining an unjust status quo that affects everyone. Psychologists, for example, advise legislators and political leaders and judges on public policy issues, write books for the general public encouraging individualist rather than communal problem-solving, help pacify disaffected workers and prisoners, and use psychological principles to facilitate advertizing and other means of keeping the general population focused on consumerism, competition, career, fashion, and other individualistic pursuits. (p. 5)

One need only reflect on the debate concerning the recent advertising campaign conducted by British Petroleum (BP) as a means of conditioning the public to adopt a positive attitude of BP as a corporate symbol. This process has long been known as manufacturing consent (Herman & Chomsky, 1988), which is employed not only in special situations, but includes what goes on in schools as a necessary aspect of creating citizens who are patriotic and loyal to both government and the capitalist system. The individualistic approach to social life therefore portrays capitalism not as an unjust and irresponsible relationship driven by nothing more than profits, but as a caring and necessary member of the community. Reflecting in law, the corporation has the rights of an individual thereby shielding the physical leaders, decision makers, and owners of corporations from legal responsibility. Lawsuits from environmental groups and worker coalitions, for example, are diverted away from CEOs and focused, instead, on the corporation itself.

Kincheloe points to another consequence of an individualist, decontextualized psychology, that is, widespread misdiagnosis. Because the individual approach to psychology is assumed to be *a-cultural*, or without cultural influence, and thus objective, its white, Western, pro-capitalist internal norms lead psychologists to misdiagnose *difference* as *disease*. Looking at the psychological/philosophical roots of the work done by mainstream educators, Kincheloe (1993, 2005) therefore concludes that the Western, positivistic, Newtonian, Cartesian, science informing it is fundamentally anti-democratic due to the subjugating impulse of its monologicality. That is, Kincheloe observes that because scientists present the knowledge produced through their methods as the only valid and reliable source of knowledge and thus reasoning, they exclude the insights and knowledge produced by indigeniety and other non-dominant and non-upper-middle-class white male sources, including the many overlapping and interrelated critical traditions such as Marxist, anarchist, anti-colonialist, and feminist sources.

Kincheloe rightly connects this exclusionary tendency to the process of colonialism, slavery, and capitalism as a discursive tactic to define those targeted for enslavement, exploitation, or other forms of abuse as cognitively deficit or primitive, and thus forever dependent on their naturally superior white male ruling class—or representatives of this dominant form of political and social power, that is, the basic structures of *class* power. The authority of science is invoked here to cover up bias and coercion drawing on the rhetoric of objectivity, neutrality, and back-to-the-basics/No Child Left Behind/Race to the Top. The dominant paradigm therefore continues to be informed by a purely technical, decontextualized approach to cognitive existence. That is, learning is remembering facts that can be regurgitated on a regularly and frequently scheduled standardized examination. Who the learner happens to be is inconsequential, we are reassured. In the meantime, those who do not possess the dominant culture—especially its aggressive values of competition and domination—are not viewed as informed by a different paradigm, and thus sophisticated in their cognitive abilities, but as wrong, deficient, and in need of behavior modification. Because behaviorism takes a decontextualized approach that views whiteness and capitalism as non-perspectives or as part of natural reality, it can hide behind the discourse of neutrality as it advances the interests and policies of a Euro-centric neoliberal capitalism.

When we take a snapshot of life in schools, we therefore have to consciously not reproduce this decontextualized approach that is not concerned with who the students are and how worldviews fundamentally inform how people construct meaning about the world. If, however, educators or policymakers happen to be interested in developing curricula that *are* interested in *who* students are, it is usually done in the interests of assisting traditionally oppressed students (i.e., African-Americans, Native Americans, Chicanos/as, the working class, etc.) in acquiring the knowledge and cultural capital needed to survive within the world that exists without thought of transforming the central structures responsible for the inequality in the first place. In fact, this has been the historic role or *purpose* the settler societies in North America have designated education for formerly enslaved Africans and Native Americans displaced from their land and thus land-based economies (Malott, 2010a).

These historic tendencies to subjugate all knowledge systems or philosophies that do not support the perpetuation of the basic structures of power, that is, the economic relationship between the capitalist class, about 1% of the global population, and those who depend on a wage to survive, nearly the entire human species, are alive and well in this era of neoliberal absurdity. That is, at this juncture in its historic development, mainstream educational psychology has continued to advance its decontextualized behaviorist paradigm to increasing heights. Of course, as demonstrated in Chapter 1, this current context has a long and controversial history. For example,

- First published in 1928 Edward Bernays' *Propaganda*, drawing on insights from the behavioral psychologists, makes the case for the use of propaganda to ensure a smooth running democratic society. Bernays (2005) defines propaganda as "the conscious and intelligent manipulation of the organized habits and opinions of

the masses" (p. 37). Outlining the role propagandists play in society, from advertisers to educators, Bernays (2005) notes that "those who manipulate this unseen mechanism of society constitute an invisible government" (p. 37). Making this point, Bernays argues that "whatever of social importance is done today, whether in politics, finance, manufacture, agriculture, charity, education, or other fields, must be done with the help of propaganda" (pp. 47–48). Essentially then, Bernays argues that the behaviorist educator is serving a propaganda function. While this insight holds true today, the word *propaganda* fell out of fashion during World War II with Nazi Germany. Today, other language, such as *accountability*, *choice*, *No Child Left Behind*, and *Race to the Top*, serves similar propaganda functions.

- The propaganda behaviorist approach to education, advocated for by Bernays and others, has since adopted the language of positivistic objectivism. This tradition of educational psychology implicitly supports the interests of capital with firm roots in modern, and often unethical, psychological experimentation. Notorious here are projects where subjects, typically students being paid or receiving credit for participating, do not know the true purpose of the study until after it is over—a classical propaganda model. For example, in 1963 Stanley Milgram published the results of an obedience experiment he conducted. Subjects were told that they were participating in a learning study. When subjects entered the lab, they were met by a stern *scientist* in a lab coat and a man in street cloths sitting in a chair. The two non-scientists drew slips of paper. The subject always drew the paper that read "teacher," and the actor playing the other subject always drew the paper labeled "student." The teacher was to punish students for making mistakes as a way to condition or teach them to successfully complete a task. The punishment was an electrical shock set at increasing increments from "slight," to "severe," and finally to "XXX," at which point the student would stop screaming and pass out. The majority of subjects, 65%, the researchers found, *were* willing to *go all the way*, as it were, delivering what they believed was a potentially lethal pulse of electricity, and, consequently, suffered years of trauma. Milgram was therefore not really studying learning, but obedience. He was interested in finding out to what extend ordinary people would obey orders to cause another person serious harm. In other words, Milgram was researching the limits of propaganda, the results of which hold some scary conclusions. Milgram's study, in many ways, provided support for behaviorism because it can be interpreted as evidence that people are *fully malleable* and thus nothing more than the product of their external conditioning. Even though the study sparked outrage from the professional psychological community and therefore resulted in an intensification of the code of ethics in conducting psychological experiments, concerning issues such as honesty and harm, the central decontextualized assumption that research is objective and disconnected from the larger society has gone unchallenged in mainstream psychology. That is, the presuppositions concerning knowledge production where the neutral scientist discovers hidden truths about the nature of human behavior have gone unchallenged. Mainstream educational psychology therefore continues to tend to serve a propaganda function.

- In the field of psychology Milgram's influences were decidedly behaviorist. The behaviorist tradition of experimental psychology is usually traced to the Russian psychologist Pavlov, who, in the 1890s, developed a series of studies with dogs. Pavlov found that when presented with food dogs would begin salivating before eating, which they called an *unconditioned stimulus*. Inspired by this finding Pavlov and his team designed another experiment where the dog was presented with food and a tuning fork several times. As expected, after learning to associate the tuning fork with food, the dog would begin salivating when presented with the tuning fork alone, which they termed a *conditioned response*. From this work Pavlov concluded that animal behavior is the product of environmental stimuli, which can therefore be predicted and manipulated to elicit desired results (Boyanton, 2010). Watson, during the 1920s, was the first psychologist to introduce behaviorism to the United States. In his approach he changed the subjects from animals to humans and the focus from behavior to emotions, directly influencing the field and prominent psychologists such as Milgram. Watson conducted studies where an infant was presented with a fury stuffed animal they enjoyed and cried for when it was taken away. After establishing this positive relationship, Watson would introduce the stuffed animal with a loud scary noise causing the infant to cry and become scared. In a short time, the child would no longer become happy when presented with the stuffed animal, but would become scared when it was presented alone without the scary noise. Consequently, Watson concluded that emotions, as well as behavior, could be conditioned. Rather than determined by biology or instinct, Watson argued that emotions are merely the product of external conditioning. Finally, Skinner, beginning in the late 1930s, concluded that behavior is determined by the consequences of behavior arguing that people are more likely to perform a task if they know they will be rewarded after completion, which he coined *operant conditioning* (Boyanton, 2010). In the context of education this is most commonly associated with teachers using praise and rewards to condition students to complete homework and other desired tasks.
- In the contemporary era we have once again witnessed the resurgence in the propaganda/behaviorist function of education. With the ascendancy of Charter Schools (i.e., for-profit corporations controlling public education dollars through NCLB high-stakes testing punishments) in large urban school districts, such as New York City, we are also witnessing a resurgence of Taylor-like social efficiency and an ultra-mechanical behaviorist approach to education as *fact* learning—another classical tactic of propaganda. That is, teaching the point of view of the bosses, such as capitalism, represents the most advanced and last stage of human cultural evolution, as objective *fact*. Many of the managers of these corporations, such as KIPP, have been known to boast that in their high needs schools (i.e., black, brown, and working class) as much as 40% of their instruction is dedicated to what they call *character building*—another example of the new discourse of propaganda. For example, at a KIPP recruitment happy hour I attended in New York City, I was told by a KIPP recruiter that the students in their Bronx school *have lots of opportunities but they do not have the right socializing skills*, and that, *they do not know how to behave to be able to*

take advantage of what is out there, followed by a wink and a nudge. The goal of these KIPP employees, from classroom teachers to the principal, who were quite diverse in their race/ethnic backgrounds, but all seemed to be interacting in the middle-class, white, unstated culture of corporate America, in this case, KIPP. These representatives therefore seemed to not be challenging their institutionally prescribed roles at KIPP, that is, to uncritically assimilate their African-American and Latino students into the middle-class culture of the business or specialized class—this *is* the function of propaganda. There is no discussion of struggle or choice, but just of *doing what we have to do* perhaps, if we are lucky, implicitly knowing it is because *it is what the bosses demand, and the bosses are the gate-keepers to economic security*. Within these corporate institutions we are therefore witnessing an intensification of the implicit white, pro-capitalist norm lurking in the dark corners of behaviorism's ontological mysticism.

- State policies have been no less racist and *pro-capitalism as the end of history* as we find in the corporate world. That is, state policies are too following a pro-paganda model of education. For instance, the case of Texas is indicative of how the corporate control of education has resulted in the increasing divisiveness of school curriculum with an implied presupposed reverse racism behind the inclusion of conservative (i.e., white supremacist) movements juxtaposed next to the Civil Rights Movement ignoring the nearly 500 years of affirmative action that European Americans have been granted in America at the expense of Native America land and labor and enslaved African labor.

- Finally, most recently at the federal level, the behaviorist impulse, despite the election of the nations' first black president who won on promises of *hope* and *real change*, has continued to advance the monologicality of *one-size-fits-all*, in ways that exceed, in behaviorist absurdity, the astonishing levels reached by No Child Left Behind. Obama's corporate campaign was therefore a masterful example of propaganda for it was able to co-opt the social movement language of social justice to manipulate the public mind to continue to support the interests of wealth and privilege. For example, it is argued that because of Obama's racial status and his subsequent ability to operate under the guise of equity and civil rights, he is able to advance the neoliberal cause of privatizing public education (and social life more generally) more forcefully and conservatively than Bush. It is therefore not surprising that rather than allocate more financial support for a drastically underfunded and dysfunctional system of public education, he has advanced the cause of charter schools as the neoliberal, however unstated, panacea for so-called *failing* schools (Porfilio, 2010).

- Because of the central role neoliberal capitalism plays in the contemporary era, it is worth outlining specifically what it is. The late anarchist/activist historian, Howard Zinn (1997), describes the era in which the economic and social foundations of neoliberalism were laid as becoming "the permanent characteristics of the United States in the twentieth century" (p. 178). Zinn (1997) points to "the growing power of corporations" (Zinn, p. 178) and the conservative tendencies of trade unions as those features of the economic infrastructure of the United States that continue to hold political sway and which gave birth to a

neoliberal global capitalism designed to subjugate and permanently debilitate working-class revolutionary agency that naturally emerged from the oppressive power of a Euro-centric-military-corporate-industrial-ruling class power structure.

- Because neoliberalism is dedicated to privatizing every aspect of human life, we can look at another aspect of social life, energy production, and consumption that, in North America, is so thoroughly hegemonized as a private enterprise; it is rarely questioned. Few New Yorkers, for example, are aware where the power that drives their refrigerators, air conditioners, computers, and cell phones comes from. Most people might know the corporate know and symbol of *Con Edison* because their repair vehicles and service workers are everywhere, and because many people pay them a utility bill every month. However, far fewer city dwellers have knowledge of where the electricity, for example, comes from. Connected in Westchester Con Edison is able to draw from the power grid of Upstate New York. New York City is also connected to the Long Island Power Authority from the East. Coming from New Jersey's Public Service Electric & Gas Company substations from under the Hudson connect residents of Staten Island and Brooklyn to the power grid. In addition to these sources, New York City generates its own power through a series of privately owned small-scale natural gas and/or diesel fuel power plants. A total of five private parties control nearly 100% of this internally generated power—Reliant Resources, NRG Energy, and KeySpan own the electric plants and gas turbines divested by Con Edison; New York Power Authority owns the Poletti plant and a slew of gas-fired combustion turbines at six sites throughout the city and one at the Kennedy Airport; Con Edison owns a number of generators for the production of steam and a few combustion turbines with long-term contracts through Cogen Technologies (previously owned by Goldman Sachs). While most of these generators run off of natural gas, which is relatively low in sulfur and nitrogen oxides, there is concern about the health risks associated with *fine particulate matter* (New York City Energy Policy Task Force, 2004). These concerns, however, are of little concern to corporations that are motivated by wealth generation. Again, this context is important from a postformal perspective because it represents part of the social context in which knowledge production is always situated in. It is therefore telling that these insights regarding something that directly affects every person in society, electricity, is something most citizens have so little knowledge of. A postformal psychology therefore engages students in reflecting on all these issues because its high standards of rigorous criticality demand it.

Basic Principles

Postformalism [is] a socio-cognitive theory that blurs [the] boundaries separating cognition, culture, society, epistemology, history, psychoanalysis, economics and politics. (Kincheloe, 2005, p. 30)

Again, as we are reminded by this succinct definition, postformalism goes far beyond mere critique offering a true alternative to the reductionistic mechanics of the boss' behaviorist approach to cognition and the monologicality of its conception of intelligence. More specifically, postformalism uncovers the white culture, and its acquiescence to power, that is the hidden curriculum of behaviorism or the hidden agenda behind claims of objectivity. The notion that one's intelligence can be disconnected from the cultural, political, and historical context in which it is unavoidably situated in is, at best, naïve, and, at worst, a clever way to mask the Euro-centric, pro-capitalist, class agenda of dominant society schooling.

Uniting these various approaches to studying and understanding human life, we might therefore observe that postformalism is a critical interdisciplinary approach to knowledge production because it understands that everything concerning the mind and human consciousness, from our innermost genetic developments to our most external social influences, is part of the same whole always situated within the political context of human societies and their internal contradictions and struggles—in the contemporary era between capitalistic authoritarianism and democratic, free-association egalitarianism. Richard Brosio (2000) describes this as the tension between democratic and capitalist imperatives. Marx and Engels (1848/1978) famously described this dynamic as the class struggle between the ruling elite class and the working class, that is, the vast majority who rely on a wage to survive.

In *A Call to Action* (Malott, 2008), however, I describe this historical tension between competing interests as far more complex than consisting of just *two sides*. For example, the struggle between European colonizers and those marked for colonizing is far more complex than a predictable binary/duality would suggest. That is, in settler societies such as the United States and Canada, there has always been a class struggle between the small class of elite European colonialist investors and profiteers and those imported European peasants marked as a natural resource to be exploited for their wealth-generating capacities. It might also be observed that this struggle between European classes is just a competition for the control of the value extracted from land denationalized from Indigenous or Native American communities and civilizations. Part of this process of wealth creation always involved the elite colonizers employing tactics of divide and rule to deepen preexisting tensions between Native groups as a means of conquering and destroying them all. Consequently, it is not always clear what agenda or interests Native American groups are supporting.

This picture of complexity is very much in line with Kincheloe's (2005) postformalism that seeks to *maximize variables* rather than *reduce* them. That is, to continue to increase the criticality of our practice, we must continue to strive to increasing levels of academic, critical rigor to best understand where power resides and how it operates, socially, psychologically, economically, and so on. Knowledge production never happens outside the context of politics and the historical development of society and the interests and agendas that are either supported or subjugated. Knowing that the binary view of power is inaccurate prevents the critical pedagogue from falling victim of essentializing constructions that falsely portray all

oppressed as conscious of their own oppression and all white people conscious of their privilege and role in reproducing structures and practices of domination.

The following points provide a conceptual framework for beginning to understand the *big picture* of what postformalism *is*:

- Our understanding of the world is always socially constructed. That is, there is no objective knowledge about the world that exists independently of what people construct in their minds. That is, contrary to the claims of realism or Western science, the mind is not a mirror that simply reflects objective reality. Rather, the mind, through socially constructed interpretive frameworks, constructs meaning about the world to fit those schemas. Because our schemas are constructed slowly through the process of being socialized into particular societies, individual social actors often do not realize they are informed by very specific philosophical ideas about the world. That is, people tend to understand their own views and ways of thinking as just how it is. It is not until we are presented with contrary views that we are presented with an opportunity to reflect on how we think and why we think the way we do.
- Because societies are constantly evolving dynamic, contradictory, political entities and because people are inherently social beings, all knowers construct knowledge based on the time and place of where they came of age as well as from their particular gender, race/ethnicity, class, ability, etc., positionality, also a product of the political nature of social history.
- Postformalism is therefore interested in challenging students and teachers to reflect on the socially constructed nature of who they are and what they know and how they came to know it. Central here is therefore an intense interest in the role power plays in the process of how some knowledge is normalized and naturalized and therefore validated and other knowledge is subjugated and thus invalidated. Essentially, what is at stake here is the battle over paradigms.
- Because postformalism rejects a purely reductionistic approach to knowledge production where individual components are never put back together, as is the case with Chomsky's minimalism (see Chapter 1), postformal social studies would reject the dominant paradigm which reduces history to many disconnected and unrelated histories, such as Native American history; the history of Africans in America; the history of the United States, where *United States* is a white supremacist signifier for the ruling class of Europe and a new ruling class that emerged out of the American Revolution, suggesting that these histories are distinct. While it is true that Europeans, Africans, and Native Americans are constructs that represent real cultural and geographical distinctions, postformalism looks to the ways that everything is always interconnected and interrelated. In the contemporary era, we look to 1492 as the year Columbus washed up on the shores of the Caribbean Basin leading to a process that would forever weave the histories of all people into one interconnected, complex, and contradictory amalgam of stories, points of view, and competing interests. For example, it is impossible to talk about the history of Africans in the post-1492 era without talking about Europeans, and it is not possible to talk honestly about European influence in

the Americas without understanding the complex power dynamics of the many Native American powers, many of whom were antagonistic to one another, along the Eastern seaboard of what is today the United States of America.

- Always looking for connections, postformal scholars do not hesitate to go beyond the contemporary era and venture into antiquity searching for connections and ways of seeing that can advance the cause of social justice and alleviating human suffering in the here-and-now. It was with this point of view that I co-wrote *Teaching Native America Across the Curriculum: A Critical Inquiry* (Malott et al., 2009). In the first chapter of the book, "Why is Philosophy Important for Teaching the Americas?," I trace the philosophical roots of the modern, Western paradigm to not only European sources, but to ancient, Black Egypt and to the Haudenosaunee of Upstate New York, who the British called The Six Nations and the French the Iroquois Confederacy.
- Fiercely committed to social justice, the postformal educational psychologist is deeply engaged in challenging the psychological processes of domination. Freud's work here is central to understanding why teacher education students consistently resist engaging with their repressed drives and desires. That is, because it is not pleasant to confront the ways one has been indoctrinated by the dominant ideology, students, across geographical, cultural, racial, linguistic, and gender lines, will consistently express signs of discomfort and displeasure when asked to reflect on the ideas, values, and beliefs they possess. The discomfort, in part, stems from the fact that most people have never been challenged to engage in such reflections and thus are not fully aware of their own worldviews and the interests and agendas they had been unknowingly and naively supporting. That is, we are conditioned to view the dominant paradigm we are socialized into as *just the way it is* or a non-perspective/objective reality and thus taken-for-granted and not requiring special attention or contemplation.
- Postformal researchers, educators, and activists, dedicated to previously subjugated knowledges and ways of knowing, search for insights and practices developed by traditionally oppressed communities in their struggles against dehumanization.
- For example, in the United States, after the Civil War and the abolition of slavery in 1865, while the Northern capitalist ruling class was busy constructing a domesticating education for African-Americans, the undercover agency of the Black Church in the South had already a long established history of subversive educational and liberatory practices despite compulsory *ignorance laws* (Malott, 2010a). Underscoring the significance of the Black Church as a pivotal vehicle for black liberation, Eric C. Lincoln (1984) has commented that, "by the end of the Civil War, to belong to an African church was the clearest statement about how one felt about freedom" (p. 64). "God's challenge," from the perspective of the Black Church, was for "every man [sic] to realize the highest potential of his humanity by being a living testament of the divine image in which he was cast. Since God himself was free, and was created free in his image, then man's struggle must ever be to maintain or recover the freedom with which he was endowed by his Creator" (Lincoln, 1984, p. 63).

- The African-American liberation struggles that have emerged from this legacy of the Black Church have always been rooted, at various levels of complexity and sophistication, in the African cultural and spiritual heritage because slavery, through the process of cultural genocide (Malott, 2008), required its African subjects to abandon their Indigenous cultures and religions in the creation of an enslaved subjectivity. The significance of this African culture and history, situated in the context of white supremacist America, lies in the evidence that overwhelmingly suggests that ancient *Black* Egypt provided ancient Greece with the model of civilization that the West would later attribute to European sources and therefore the basis of white supremacy (Bernal, 1987; Diop, 1955/1974; Malott et al., 2009). This history therefore disrupts the paternalistic white supremacy that portrays Africans as primitive, underdeveloped savages whose salvation resides within the hands of their white, naturally superior masters. Consequently, liberation, for many enslaved Africans, meant not only freeing oneself and one's community from chattel slavery and later wage-slavery (i.e., industrial capitalism), but recovering one's African cultural heritage.
- Postformalism is therefore not afraid to embrace conceptualizations, such as spirituality, that have been mocked by Western scientists as inferior or the sign of a non-scientific mind blurred by false, inferior, and thus primitive notions. Rejecting the elitism of the so-called scientific community, postformalists accept the complexity of a non-mechanical mind animated not by an external God-like force, but by an internal free will or spirit endowed with an ontological need to be freely associated with other human spirits and the natural world. Rather than providing evidence of underdevelopment, the notion of the spirit as a free entity contributes to the complexity and sophistication of Newton's *action at a distance*, which his own propensity for mechanical philosophy, ironically, did not allow him to fully embrace even though it was a conclusion of his own research and analysis.

The Bricoluer: Postformal Research Methods

To conceptualize what the postformal educator as researcher looks like in practice, Kincheloe adopted the notion of *bricolage* from Norm Denzin and Yvonna Lincoln. In the Introduction to their edited *Strategies of Qualitative Inquiry* Denzin and Lincoln (1998) define "the researcher-as-bricoleur" as "always already in the empirical world of experience" because "qualitative researchers self-consciously draw upon their own experiences as a resource in their inquiries" (p. xi). Put another way, "the multiple methodologies of qualitative research may be viewed as a bricolage, and the researcher as bricoleur" (Denzin & Lincoln, 1998, p. 3). The bricoleur is a knowledge producer who holds the many tools of qualitative research, including his own lived experiences, which he puts to work solving the problems and answering the questions of professional inquiry. If need be, the bricoleur is fully prepared to construct new tools to successfully construct the bricolage. The goal of

piecing together a multi-methodology is to achieve deeper understandings of particular phenomenon. This might be called triangulation, but the intention is not to bring into focus objective reality, because the constructivist philosophy rejects the epistemological position that knowledge is out there waiting to be discovered in favor of the idea that multiple perspectives provide a closer approximation of a phenomenon. Hence, the bricoleur always strives for increasing rigor and depth.

Kincheloe (2005) reiterates the foundational work of Denzin and Lincoln describing it as denoting "a multimethodological form of research that uses a variety of research methods and theoretical constructs to examine a phenomenon" (p. 8). It should not be surprising that Kincheloe found the bricolage as a multi-method approach to research particularly conducive to his postformalism, a multi-epistemological approach to knowledge production. This notion of bricolage has become central to Kincheloe's theories because he does not separate the acts of teaching and learning from conducting research—they are all part of the same con-textualized approach to the construction process. Advancing the notion of bricolage as complex approach to problem solving, we can define it in the postformal sense as a rigorous approach to solving the problem of how to disrupt the basic structures of power that are the root cause of human suffering and a neoliberal imperialist global order. Here the bricoleur is a postformal revolutionary knowledge producer engaged with communities searching for new ways of seeing and knowing that can lead to paradigmatic transformation. From this perspective "the knowledge that critical constructivist researchers produce is grounded on the assumption that the world is shaped by a complicated, web-like configuration of interacting forces" where "the knower and the known are inseparable" (Kincheloe, 2005, p. 25). That is, the researchers' own historicity and subjectivity inevitably informs the knowledge one produces.

However, the postformalism adopted here rejects the anything goes approach of the extreme relativism persuasion. The idea is therefore to be honest about the limits of one's own point of view situating it with different perspectives to create understandings and practices that can subvert the propaganda function of behaviorist schools that overwhelmingly and historically have been informed by invalid constructions presented as absolute truth, such as *Columbus discovered America* or *Africans are only three fifths of a human being*, to offer just two obvious examples. While we are cautious and skeptical of claims of absolute truth and certainty, we do believe that it is both possible and necessary to identify and depose concentrated and coercive forms of economic and political power as a central purpose of our postformal approach to educational psychology.

Freud's psychoanalysis becomes important to the bricoleur here as it offers significant tools that can be employed to better understand the psychological mechanisms through which the basic structures of neo-colonialist/neoliberal capitalist power are reproduced within the individual. These insights are crucial for the postformal researcher engaged in critical self-reflection as part of the process of understanding one's own subjectivity and the ways we have been indoctrinated and socialized to reproduce capitalism through the act of knowledge production. That is, to construct more counter-hegemonic forms of knowledge, the researcher

must be ever more conscious of self-situated in a social, historical, political, economic context.

Conclusion: What Does It All Mean?

Our knowledge work in cognition and educational psychology is therefore always done from a postformal approach, which is not a static and rigid theory, but rather, it is a constantly developing and self-reflective process of moving the purpose of education from domestication to liberation. We might also observe that as post-formal educators our conceptions of the nature of the individual as an inherently social being challenge us to always situate our psychological work within the larger historical, political, economic, and cultural contexts of human society. These constructions of mind and our subsequent critical practice also demand that issues of race, class, and gender are always at the forefront. Such challenges comprise the content of the postformal bricoleur dedicated to knowledge work for social justice and movement against neoliberal capitalism.

From this revolutionary approach to the postformal bricolage, the boundaries between the researcher, policymaker, educational leader, educator, and student are not only blurred, but they transgress the walls and contexts of government offices, schools, universities, and professional conferences. That is, the revolutionary bricoleur could be anyone in society from the cashier at your local supermarket to the Jamaican Grand River banana boat tour guide. This conceptualization is similar to the idea of the *organic intellectual* conceived of by the Italian communist Antonio Gramsci who was jailed by the fascist Italian government during World War I for his beliefs. That is, Gramsci argued that the existence of a hegemony, where the dehumanizing values and programs of the ruling class are normalized, will always lead to a counter-hegemony as people possess an inherent propensity for freedom and happiness. Chomsky (2002) has connected this theory of mind as naturally *free* to humanity's need for the perpetually creative use of language and, therefore, the free use of one's labor power.

While Chomsky's insights concerning mind are indispensable for my particular approach to revolutionary postformalism, Kincheloe and others caution against the traps of both biological determinism and environmental or social determinism. Such caution is also indispensable because any form of determinism occludes human agency—the heart of critical pedagogy. Following Kincheloe and Descartes, among others, our conception of mind therefore rejects the hierarchy of intelligence paradigm that suggests that high levels of cognitive ability are rare qualities found only among an elite few and therefore the natural leaders and bosses. Rather, we embrace the long tradition of scholarship that acknowledges that good sense and reason are the human qualities that are the most equally distributed throughout the species.

This potentially counter-hegemonic insight offers the revolutionary bricoleur an unlimited array of democratic possibility. Within this reasoning there also exists a solid challenge against neoliberalism, which is based on the assumption that

intelligence is unevenly distributed among humanity rendering competitive capitalism the system that most closely approximates human nature because it allows the naturally superior individuals to rise to the predetermined place of domination. Any attempt to legislate equality therefore represents an attack on freedom because it holds biological elite back from their place of superiority.

Chapter 6
What Is Critical Pedagogy? The Historical and Philosophical Roots of Criticality

While educational psychology takes the mind and learning as its central concern, critical pedagogy, on the other hand, takes the role of institutional power in education and its influence over citizenship formation in capitalist, white supremacist, homophobic, patriarchal society as its primary focus. In other words, we might argue that psychology's center of analysis is the biological context whereas critical pedagogy's is the social context. The power of the postformal approach to educational psychology outlined in this volume resides in my effort to take as the center the biological *and* the social contexts as two parts of a larger whole. However, in this chapter, we take a closer look at critical pedagogy in relative isolation from educational psychology. While we reject such reductionism as a final analysis, we understand the value of isolating a specific variable, such as critical pedagogy, for the purpose of more deeply understanding it before it is resituated within its larger social *and* biological context (see Chapter 7). What follows is therefore an in-depth historical and conceptual review of critical pedagogy.

Most introductory volumes to critical pedagogy correctly situate the theoretical roots of the tradition within critical theory, looking specifically at the German Frankfurt School around the time period of World War II and the early work of Henry Giroux during the 1980s (see Chapter 1). This important history has also been traced to the first half of the twentieth century to leading progressive educators such as John Dewey and W.E.B. DuBois (Darder, Baltodano, & Torres, 2008; Kinchelo, 2008). Making such connections, Darder, Baltodano, and Torres (2008), reflecting on Giroux's (1981) formative role in what I have called *academic* critical pedagogy (Malott, 2010b), note that he "would be the first to adamantly insist that critical pedagogy emerged from a long historical legacy of radical social thought and progressive educational movements" (p. 2).

However, before this formative context is explored in Chapter 6, *academic critical pedagogy*, I first examine what I call *revolutionary critical pedagogy* here in Chapter 5, the roots of which are firmly grounded within the Arawak resistance against Columbus, and then, within the same Caribbean island, the successful Haitian Revolution beginning in 1791 ending in 1804 (Malott, 2010b). A reasonable location to situate the *beginning* of this history might be located within the Arawak

resistance against Columbus because his legacy defines the brutality and barbarism of the contemporary, Euro-centric capitalist present (Malott, 2010b).

That is, the never before seen savagery that Columbus and his men brought to what they called Hispaniola (currently Haiti and the Dominican Republic) continued to develop and intensify within their trans-Atlantic slave-trading, which eventually would mutate into global capitalism withholding the same insatiable appetite for wealth and disregard for human and ecological life and diversity. As with the Western philosophy informing Columbus, the worldview and drive of capitalism similarly fail to recognize that the health and well-being of humans, including the bosses, are unavoidably dependent upon the health and well-being of the Earth's vast ecosystems. Consequently, this destructive impulse has now placed life itself on this planet in uncertain terms. Again, the horrifying nature of the world today, in large part, has the life and legacy of Christopher Columbus to thank, and the European ruling class from which he came and supported through his actions. As previously suggested, there are countless other examples of peoples resisting the Columbian impulse of assimilation, conquest, and/or exploitation that we could focus on that have inspired today's various critical pedagogies. A few of these include

- The *black Indian* Seminoles who began migrating to Spanish-controlled Florida around 1733 where they resisted British and then US subjugation for more than 100 years (Katz, 1986). Despite this rich history regarding the close relationship between Africans and Native Americans throughout the Americas resulting in as much as one-third of the US African-American population possessing Native American ancestry, these stories are rarely told in mainstream history textbooks. According to William Loren Katz (1986) in *Black Indians: A Hidden Heritage*, US history books obscure and distort this rich history by inventing stereotypical *differences* between Africans and Native Americans portraying Africans as passive and willing slaves and Native Americans as noble savages whose time has tragically, yet unavoidably, come and gone. Ultimately, what is ignored and attacked is the deep friendship and political alliance between those who shared and continue to share a common oppressor.

  In Florida this alliance posed such a threat to colonialist hegemony that the policy of genocide by European colonizers was, in part, a way to "prevent their alliance with Africans" (Katz, 1986, p. 7). The English, in their colonization of the Eastern seaboard, from the beginning, began pitting tribe against tribe, always in the interests of the emerging bosses. By the early 1700s the Yamasee, the Guale, the Apalachee, the Cofitachiqui, the Timucuan, a portion of the lower Creeks and a significant number of formerly enslaved Africans, fed up with being betrayed, tricked, divided, and ruled, eventually migrated south to Florida becoming, and remaining, Seminoles (Churchill, 1997; Katz, 1986; Porter, 1996). The term Seminole is a Creek word that means runaway or rebel. Accepting Africans into their society was natural for the Seminoles as they themselves were multi-ethnic and came from communities that frequently adopted *outsiders*. The relationship between Africans and Native Americans in Florida was therefore based on mutual aid.

These *African* Africans survived the harsh swamp conditions of Florida employing a method of cultivating rice originating from Senegambia and Sierra Leone (Katz, 1986). Excursions into this harsh environment by enslavers only began once such rice-fed maroon villages became large enough to pose a threat to the hegemony of the slave society. As the Native Americans in the swamp relied on Africans for agricultural knowledge, Africans depended on the military protection from their Seminole friends. The United States was unable to defeat the Seminoles, who were fast becoming a Nation of one—composed predominantly of Africans, Native Americans, and their *mixed blood* offspring. The colonialist, enslaving aggressor understood that breaking this unity was the key that would destroy what was becoming a *red-black nation* within North America, which, from the colonialist enslaving perspective, was absolutely not acceptable.

Consequently, the white ruling class of what had become the United States of America organized their militias, armies, and Native American allies and set out to crush *red-black* independence. As a result, the Seminoles lost as much as 50% of their population during the mid- to late 1800s (Thornton, 1987). Offering a portrait of Seminole solidarity and unity was the Creek leader Wild Cat (Coacoochee) and the African chief John Horse (Cohia) who together led their Seminole Nation for decades against external subjugation. Summarizing the relationship between these two figures, William Katz (1986) notes that "their friendship would last for twenty years and revolve around their agreement that red and black Seminoles were blood sisters and brothers whom no foe could part" (p. 64).

Today, *red-black Seminole Indians*, still with no land of their own, despite being promised a reservation by the United States in a treaty that somehow *disappeared*, are scattered throughout the South and Southwest. Because of the long period of time, the Seminoles militarily resisted the United States and the consciousness that generations of Seminoles were raised with as a result of growing up in struggle against the aggressor, at some level, I think it is not too far a stretch to argue contemporary African-American militancy, from Malcolm X to the Black Panther Party, can be traced back to the Seminoles. A critical Seminole pedagogy for the twenty-first century might therefore take inspiration from such leaders as John Horse and Wild Cat.

- The Peace Maker and the Great Law of Peace of the Haudenosaunee—the Iroquois/Six Nations of Upstate New York—which was developed 1,000 years or more before the arrival of Columbus, rendering it by far the oldest democratic confederation of nations in history. This system of shared governance is designed to ensure democracy and peace by putting power and decision-making in the hands of the people united in a confederation of nations and not in the divine right of a ruler. This model for equality and liberty would go on to inspire the European Enlightenment and the founding of the United States as a *united* group of *states* or colonies around hotly contested principles of democracy and human rights. *Founding Father* and co-architect of the United States Constitution, Benjamin Franklin, argued that *if this group of ignorant savages*, the Haudenosaunee, *can create something seemingly indisolvable, then surely we, who have roughly the same needs, could also create such a democratic*

confederation (Lyons & Mohawk, 1992). Needless to say, few American citizens know of this rich and complex history, thanks to the doctrinal system, which rigidly controls *the national story* by controlling the curriculum with content standards and standardized, high-stakes testing. This national story is based on an invented Euro-centrism and hierarchy of civilizations paradigm. It assumes that European civilization represents the most advanced stage of human development (i.e., democracy and capitalism). One of the major problems with perpetuating this inaccurate vision is that contemporary democracy is not a European accomplishment. This fact disrupts the national story, which serves as a justification for the conquest, plunder, and continued occupation of not only the Americas, but much of the world, through a white supremacist, paternalistic discourse of *manifest destiny* (Stephanson, 1995).

- Also making a significant contribution to this legacy is the Shawnee warrior and leader, Tecumseh, whose homeland was within what is now southern Ohio. Tecumseh attempted to organize a pan-Native American movement to resist white encroachment as it intensified after the American Revolutionary War. At the beginning of this conflict American forces hoped that the Indigenous groups of Ohio and surrounding areas would remain neutral. Even though "commissioners from Congress and from Virginia (now free of its royal government) met with a large Indian delegation at Fort Pitt in 1775 and signed a treaty that called for the Ohio Indians to remain neutral," this wish would prove illusory "partly because the Ohio tribes were located squarely between the principal British post at Detroit and the American settlements along the Ohio [River]" (Knepper, 1989, p. 38). Serving as a barrier between their own homelands and an increasingly persistent tide of foreign settlers, it is not difficult to understand why the Ohio Indians, by and large, sided with the British in the American Revolutionary War.

  Consequently, Knepper (1989), rather anticlimactically, describes the relationship the United States established with Native Americans after the war as "coercive" and "based on conquest," noting that "Americans claimed to have won a military victory over the British *and* their Indian allies in the Northwest" (p. 51). From the Native American perspective, however, "they had never surrendered to the Americans nor had they been conquered" (Knepper, 1989, p. 51). Consequently, it is not surprising that the US government ignored the Treaty of Greenville of 1795 that guaranteed that the government would ensure whites did not encroach on Indian lands east of the Mississippi (Venables, 2004b). By at least 1800 President John Adams, and then Thomas Jefferson, ignoring this border between white and Indian lands, arrogantly appointed the land hungry, Indian-hating William Henry Harrison to govern the illegal settlement of the Indiana Territory. As a result, a loose confederacy of Ohio Indians formed to resist white encroachment, settlement, and segmentation of their farmlands and hunting grounds. Again, prominent among this history of Indigenous resistance and famous leaders is Tecumseh.

  Reflecting his discursive strategy for counter-hegemonic coalition building in an 1810 speech to Harrison, Tecumseh (1995) passionately argues that whites are "never contented but always encroaching" and that "the only way to check

and stop this evil is for all red men to unite in claiming a common right to the land," which was never "divided but belongs to all, for the use of each" (p. 134). Arguing that Native individuals have never had a right to sell land to other Native Americans or non-Natives, for esteemed Native American historian Robert Venables (2004b), represents an ideological tactic based not on truth or historical accuracy, but on a desire to protect the interests of his community from an external threat whose hunger for wealth and land had long proven insatiable.

Making this point Venables (2004b) notes that "historically, Indians had divided the land into separate national domains that they defended by force and expanded by conquest, and they had frequently granted tracts to each other as well as to the whites, often in exchange for goods" (p. 60). Somewhat comically, Venables (2004b) goes on to point out that Tecumseh's long travels to all the many Indian communities North, West, and South and his location where he spent much time and energy giving long speeches on the need for Indian unity to preserve their long tradition of common claim would not have been necessary if their traditions actually included such practices. Part of the brilliance of Tecumseh's approach resides within what seems to be an appropriation of the Euro-centric myth of the noble savage popularized by Rousseau.

However, despite the inaccuracy of Tecumseh's discourse, his concerns proved truthful and somewhat prophetic. Given the allure of the Ohio country's vast waterways, timber, farmland, minerals, and fish and game, that is, its potential and actual wealth, it is not surprising the United States would imperialistically claim it for its own benefit. Mainstream historians, such as Kent State University professor George W. Knepper (1989), attempt to downplay the theft of what is now the mid-west (i.e., lands east of the Mississippi River and west of the Appalachia Mountain range) by arguing that by the time Native American groups began settling in the Ohio region, around the early to the middle of the eighteenth century, they were already dependent on European goods and, therefore, an integral part of the emerging market economy. Further decreasing the significance of this massive land theft, Knepper (1989) points to the religious conversion of some Native groups in Ohio. For example, the Delaware, having been forced westward by expanding white settlement and the growing power of the fur-trading Iroquois, had been converted to Christianity by Moravian missionaries before coming to Ohio where they established Christian Indian villages.

What followed Tecumseh's attempt to fight back and keep white encroachment at bay was a bloody and tragic period of American Indian subjugation. For example, General George Rogers Clark, who was at the treaty signing of 1784 at Fort McIntosh, became known for scalping Indians alive. In the towns of Chillicothe and Piqua alone, both in the current State of Ohio, Clark's men destroyed more than 500 acres of corn and every edible vegetable they could find (Churchill, 2003). Similarly, in 1794, General Anthony Wayne and his troops "laid waste a huge swath through the Shawnee heartland. . .for a distance of fifty mile" (Churchill, 2003, p. 304) destroying vast tracks of cornfields and homes. Commenting on the continuation of one of the most barbaric practices of US military aggression, Churchill (2003) notes that "in the aftermath, leggings crafted

from tanned human skin again made their appearance, this time along the Ohio frontier" (p. 304).

Tecumseh's confederacy was eventually defeated at the Battle of Tippecanoe on November 6, 1811, where the great leader and visionary was killed and then mutilated in horrific fashion by white souvenir hunters (Churchill, 2003). By 1830 President Andrew Jackson had signed the Indian Removal Act and groups of Native Americans began ceding their lands for tracts west of the Mississippi River *in fee simple* (Robertson, 2007). By 1831, according to Robertson (2007), "a group of the Seneca Nation signed a treaty exchanging their lands in Ohio for fee lands west of the Mississippi; over the summer, other Ohio groups, including Shawnees and Ottawa, did the same, as did the Ohio Wyandots the following January. Removal was proceeding as planned" (p. 132).

During and after the process of *Indian Removal* the Old Northwest Territory was being repopulated by "New Englanders, Middle States people, and Upland Southerners, as well as smaller representations from the Tidewater. Quakers, Pennsylvania Dutch (Pietistic Germans), free blacks, and escaped slaves added to the mix from the beginning" (Knepper, 1989, p. ix). However, Knepper (1989) goes on to explain that "the German and Irish contingents" were "among the earliest and most significant" (p. ix). A great deal of this German and Irish immigration occurred after 1837 when the engineers working for the Board of Public Works approved the construction of the Erie Canal through the region, an integral aspect of converting the wondrous biodiversity of the area into an industrial wasteland. Knepper (1989) explains that it was "unskilled laborers" who "dug the great ditches across the land" (p. 154). Some of this massive army of labor were "local farmers who did the work in the off-season, but the majority were immigrant Irish and German workers" (Knepper, 1989, p. 154).

Of course, today these folks are *white people*, the relatives of those who "lived along the routes" in small "shanty towns" and were "poor, uneducated, and passionate" and therefore treated as "social outcasts" and "ridiculed" by *people of quality* (p. 154). However, with the emergence of the corporate farm and the industrial explosion of World War II, many of these old ethnic enclaves have been absorbed and assimilated into the mainstream, white, capitalist society. As a result, many people today know nothing of this history as social studies education across America since the beginning of the twentieth century has been an exercise in blind patriotism and a romanticized view of industrial capitalism as a fully positive example of progress.

This history is powerful because it shows Native Americans, whites, and African-Americans (and all others involved) that they all have a common oppressor within the basic structures of colonialist and now capitalist power. This era also provides all people who depend on a wage to survive, the vast majority of humanity, another potent example of a revolutionary leader, Tecumseh, whose pedagogy of critical unity remains relevant in the twenty-first century. This story allows whites especially to realize that the process of colonization, which the labor power of their ancestors made possible, is not only bad for Native Americans and Africans, but it is not the best system for even those who

supposedly benefit from it, white folk themselves. It allows whites an opportunity to realize that supporting the bosses does not mean one is free or self-actualized or as happy as one could be in a more democratic, less hierarchical, dominating world.

- The Southern slave rebellions and spirit of resistance that laid the foundation for contemporary black radicalism within the United States (see, for example, Abu-Jamal, 1996, 2000; DuBois, 1989, 2001). Nat Turner represents a well-known example, who, in 1831, led a slave revolt that "rocked South Hampton County, Virginia, and the entire South, when slaves rose up and slew their white masters" (Abu-Jamal, 2000, p. 64). Reflecting on the larger context of this resistance and the ways it has since been co-opted by the hugely popular assimilationist platform and policies influenced by Booker T. Washington and the founding of the Tuskegee Institute in 1881, DuBois (1989), in 1903, notes that "while the fire of African freedom still burned in the veins of the slaves, there was in all leadership or attempted leadership but one motive of revolt and revenge—typified in the terrible Maroons...veiling all the Americas in fear of insurrection...The slaves in the South, aroused undoubtedly by vague rumors of the Haitian revolt, made three fierce attempts at insurrection" (pp. 40–41), one of which was led by Nat Turner.

- John Brown, the white, Christian abolitionist, was executed in 1859 for his militant, uncompromising, revolutionary resistance against slavery. Brown's passion for general equality was directly motivated by Nat Turner and, indirectly, and perhaps directly, by the Haitian Revolution. In an obvious effort to discount and ignore the significance of Brown, mainstream, Euro-centric historians have written him off as *crazy* and/or *misguided* (Loewen, 1995; Zinn, 1995). As the politics of white supremacy regain momentum through such corporate-funded groups as the Tea Party exploiting the confusion and anger of the United States' white majoritarian working and middle classes, the anti-racist example of white figures such as John Brown is needed not more than ever.

- Sitting Bull, Crazy Horse, and the Lakota's armed struggle on the Great Plains of North America against the US military that lasted for more than 30 years during the latter half of the 1800s (Marshall, 2001, 2004). In *A Call to Action* (Malott, 2008) I argue that the legacy of Crazy Horse offers an example of revolutionary leadership needed in this neoliberal era of absurdity. Crazy Horse's internal struggle to let his own desires and drives submit to the larger interest of what was good for the people and their future provides an example of the revolutionary leader with the long-term vision and commitments needed now more than ever as the viability and continuing existence of not only Indigenous cultures and languages are at risk, but life itself is threatened by environmental abuse and incessant short-term vision of the neoliberal capitalist profiteer.

- The class-conscious, black feminism and militancy of Sourjorner Truth (1997) showcased in a famous speech in 1851 in upstate New York. Truth's work played a significant role in the nascent emergence of feminism, which continues to inform many critical, feminist pedagogies today. The significance of Truth's point

of view resides in her ability to demonstrate the interconnectedness of gender with race and class for a critical feminism of complexity.

- Serving as one of the most influential connections between revolutionary and academic critical pedagogy has been the work of Mark—Karl Marx, Frederick Engels, and the publication of their *Manifesto of the Communist Party* (1848/1978) in particular. By the end of the *Manifesto's* first sentence—a relatively short sentence—Marx and Engels clearly break with the idealist romanticism of bourgeois scholarship by firmly situating their analysis of class within an historical dialectics of antagonistically competing interests noting that "the history of all hitherto existing society is the history of class struggles" (p. 473), and taken to its logical conclusion underscores the tenuousness of the present moment. The conclusion that Marx and Engels (1848/1978) draw from their *developmental* concept remains highly relevant and instructive: the oppressors and the oppressed "stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes" (p. 474). This observation is particularly relevant, as capital's current crisis has exposed, in stark relieve, that the very existence of capitalism is an elite class war continuously waged in a never-ending quest to increase the bottom line, which can only come from more and more unpaid labor hours put to work grinding up more and more of the Earth's vital ecosystems. As part of the process of abstracting and distorting these class relations, the stock market is incorrectly presented as the producer of value. Challenging the assumption that the "profits and losses that result from fluctuations in the price of" stocks represent "an index of genuine capital accumulation," that is, "reproduction on an expanded scale," Marx (1894/1991), in *Volume Three* of *Capital*, rather, argues that they are "by the nature of the case more and more the result of gambling, which now appears in place of labour as the original source of capital ownership, as well as taking the place of brute force" (pp. 607–609) or the exertion of labor power. With the development of global capitalism Marx (1894/1991) saw financial capitalists or bankers taking on a more central role as "imaginary money wealth" created on the stock market "makes up a very considerable part" of the money economy. As a result, bankers have become "intermediaries between the private money capitalists on the one hand, and the state, local authorities and borrows engaged in the process of reproduction on the other" (p. 609). Providing an analysis of how this system, with its built-in upward pulling gravity, without strict regulations, inevitably leads to an imbalance of commodities to consumer ratio, and therefore to a disruption in the actualization of value, Marx (1894/1991) observes that "if there is a disturbance in this expansion, or even in the normal exertion of the reproduction process, there is also a lack of credit" creating a crisis in the confidence of the actual value of credit, which is indicative of "the phase in the industrial cycle that follows the crash" (p. 614). Marx (and with Engles) therefore seems to offer what has proven to be a valid observation, that is, human society tends not to stand still—it is always in a stage of development—and as

long as the old oppressed class become the new oppressors, society will remain pregnant with a new social order.

- Emiliano Zapata, a Zapoteca Indian and rebel leader of the 1910–1917 Mexican Revolution, fought for land and therefore the right to be land-based *Indigenous* people (Lynd & Grubacic, 2008; McLaren, 2000; Ross, 2000; Zapatistas, 1998). The life and legacy of Zapata has since influenced the Mayan-based Mexican Indigenous revolutionary group, the Zapatistas who rose up in rebellion against neoliberalism and for humanity December, 1994, when the North American Free Trade Agreement was signed by Mexico, Canada, and the United States. The democratic example of the Zapatistas has played a significant role in the twenty-first century global movement against capitalism and abuse.

While these examples, among countless others, are extremely important and significant, for now, we look more specifically to Haiti—a nation we might respectfully and counter-hegemonically call *the source*—because of the often-overlooked significance of the Haitian Revolution and because the reasons for this historic *oversight* are currently highly relevant situated in the context of the recent earthquake tragedy in Port Au Prince. My efforts here are part of a larger movement designed to work against what Joe Kincheloe (2007) has identified as "one of the greatest failures of critical pedagogy at this juncture of its history," that is, "the inability to engage people of African, Asian, and indigenous backgrounds" (p. 11). My efforts here should not be interpreted as a *polite gesture*, but as the product of a transformative and activist approach to scholarship and therefore an honest engagement with the roots of criticality in this contemporary era.

However, before continuing it must be noted that these two categories of critical pedagogy, *revolutionary* and *academic*, are not mutually exclusive—they coexist and inform each other. *Academic* and *revolutionary* critical pedagogies are not only interconnected parts of a larger whole, but academic critical pedagogy is not superior to or more advanced, developed, or important than revolutionary critical pedagogy. Because critical pedagogy is not just concerned with better understanding the world, but with transforming it, academic critical pedagogy has to be cautious not to be guilty of *verbalism* where no action beyond talking or verbalizing ever transpires. At the same time, *revolutionary critical pedagogy* has to be cautious of not reproducing the old hierarchies, which would represent a failure to adequately self-reflect and grow beyond the internalized ontology of domination—a central aspect of today's dominant paradigm. Reducing this analysis to more simpler terms, we might advise as follows: do not *act* without *thinking*, but also, do not *think* without *acting*. Our quest is for *balance*.

What we are striving for is therefore *revolutionary–academic* critical pedagogy that operates counter-hegemonically not only in schools and universities, but within all of societies institutions and communities for revolutionary transformation. In practice this represents a paradigm shift rejecting the mechanical philosophy that views the world as a series of *sources* of natural resources and potential wealth. The

new or pre-modern/subjugated critical pedagogical point of view and set of values appreciates the vast complexity and interconnectedness of all life forms and ecosystems as possessing an inalienable right to exist. This critical pedagogical paradigm is therefore non-hierarchical, non-exploitative, and privileges fulfillment, peace, and happiness over wealth and profitability.

Again, rather than constructing a sharp imaginary line between two *types* of critical pedagogy, the purpose of identifying these two categories has been not only to bring attention to the complexity of the critical tradition but also to highlight two different time periods—before and after the existence of compulsory mass schooling signaling a transition from the predominant use of force to the predominant use of consent in maintaining the hegemony or the basic structures of power and the monopolization of profits by an elite few. While hegemony is maintained through the combined use of force and consent, different forms of social control have been used by elite or enslaving interests characterizing different stages in the development of the colonialist/imperialist/capitalist global system. Today, consent is predominantly manufactured through the control of ideas employing such institutions as schools and the corporate media. Our critical pedagogy, as argued below, is therefore academic because one of our major enemies is the worldview we have internalized as a result of our own indoctrination in schools and in front of the television and movie screens.

The third part of this introduction considers, in a more global context, the significance and challenges for critical pedagogy in the twenty-first century. Finally, a summary of the contents and a brief discussion of the sections are outlined providing a *big picture* point of view for the benefit of *engagers*.

Columbus, Saint-Domingue, and the Emergence of *Revolutionary* Critical Pedagogy: An Historical Introduction and Analysis

Risking unnecessary repetition, it might be wise to begin our investigation by asking ourselves, *where*, *when*, and *why* did critical pedagogy first begin? If critical pedagogy is defined as any purposeful, systematic movement constructed to challenge and end the crimes against humanity that led to and maintain unequal power relationships and the abuses they are designed to perpetuate, then we can say that it has existed across the planet in various forms since antiquity looking back to ancient Egypt and Greece (Malott, Waukau, & Waukau-Villagomez, 2009). However, while we can trace current forms of imperialism back to these ancient times, it is reasonable to locate the current, more violent, exploitative, and destructive global era in 1492, when Columbus, the nobleman, and his peasant crew washed up on the shores of what is now known as the Caribbean Basin, Haiti, and the Dominican Republic in particular. Columbus named this island Hispaniola. By the time of the Creole uprising in 1791, the island, under the control of the French, was, officially, Saint-Domingue. After the success of their revolution the formerly enslaved Africans renamed their black Republic Haiti, derived from the original Arawak name.

If we are exploring the contemporary roots of counter-hegemony in the Americas, we must start by challenging the dominant discourse that justifies the actions of Columbus by arguing that, while he may have mistreated *some* Native peoples, his ultimate influence has been *good* because he brought European Christianity, Western civilization, and progress to regions previously isolated from these glorious achievements. However, after reading Columbus' journals and other primary sources for ourselves, we realize that he was *not* interested in *saving souls*, but in accumulating wealth through the genocidal enslavement of Indigenous peoples and Africans. It is, upon closer examination, the legacy of Columbus and what he represents that needs *saving* or fundamentally transformed. Rather than bringing a more civilized (i.e., peaceful and less oppressive) form of society to the Caribbean, Columbus brought a violent, authoritarian, and barbaric system that led to the most horrendous and savage genocides in human history.

The practices of these profiteering Europeans were certainly unimaginably horrific. It has been argued that, Columbus, the businessman, was not searching for a shortcut to India, but was desperately searching for gold and potential slaves. Of the local people he encountered, Columbus wrote that "they do not bear arms . . . with fifty men we could subjugate them all and make them do whatever we want" (quoted in Malott, 2008, p. 25). Such was their fate as Arawak men were subsequently brutally forced to mine for gold to the point of exhaustion and death. Women were raped and compelled to toil on Spanish plantations. The Arawaks, who did not possess a well-developed *war culture* and were therefore not accustomed to such conflicts as their social life seemed to be defined not by competition and accumulation, but by generosity and good will, found themselves forced to develop a critical pedagogy of survival and stage a physical resistance (Roger Gaillard and Thomas Madiou, 2010). The aggressive, seasoned, warring Spaniards responded viciously with their slaughtering swords and bone-crushing horses by butchering entire villages sparing not even infants, women, or the elderly. Commenting on these bewildering atrocities he had witnessed, documented in his book *History of the Indies*, Bartolomé de las Casas, Spanish missionary and former plantation owner gone staunch critic, offers a sobering account of what took place:

> Our work was to exasperate, ravage, kill, mangle and destroy. . . Thus husbands and wives were together only once every eight or ten months and when they met they were so exhausted and depressed on both sides. . .they ceased to procreate. As for the newborn, they died early because their mothers, overworked and famished, had no milk to nurse them, and for this reason, while I was in Cuba, 7000 children died in three months. Some mothers even drowned their babies from sheer desperation. . .. In this way, husbands died in the mines, wives died at work, and children died from lack of milk. . .and in a short time this land which was so great, so powerful and fertile. . .was depopulated. . .. My eyes have seen these acts so foreign to human nature, and now I tremble as I write. . .. (quoted in Malott, 2008, p. 26)

By 1517, not even 30 years after his first landing, between 3 and 7 million Native people lay dead, well over 95% of their original population, from disease, slaughter, exhaustion, and hopelessness (Farmer, 1994; Malott, 2008). We might say that the Arawak resistance represents the roots of American counter-hegemony in the

contemporary era. The Caribbean Basin, once thriving with Indigenous culture and vitality, in a very short time (less than a generation), was depopulated almost completely. The Spanish therefore had to import labor to continue the wealth extracting process. Because Europe was largely bankrupt from a very costly and unsuccessful Holy Crusade in the Middle East, European investors looked to a seemingly limitless source of wealth, knowledge, and labor power in Africa. Already involved in the West African slave trade, Spain was aware of Africa's seemingly endless supply of riches, a wealth of knowledge for exploitation, and a vast pool of potential labor power (Malott, 2008).

The European trans-Atlantic slave-trade and practice of slavery throughout the Americas, but in the Caribbean Basin in particular, unfortunately, proved to be just as barbaric and cruel as the atrocities committed against the Arawak. The late Trinidadian educator and professor C.L.R. James (1963), in *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution*, describes the process of transporting enslaved Africans in horrific detail. Because of the relevancy and vividness of his descriptions, a sizable excerpt is provided:

> The slavers scoured the coasts of Guinea. . .They set. . .tribesman fighting each other with modern weapons. . .The propagandists of the time claimed that however cruel was the slave traffic, the African slave in America was happier than in his own African civilization. Ours, too, is an age of propaganda. We excel our ancestors only in system and organization: they lied as fluently and brazenly. In the sixteenth century, Central Africa was a territory of peace and happy civilization. . .Tribal life was broken up and millions of detribalized Africans were let loose upon each other. . .

> The slaves were collected in the interior, fastened one to the other in columns, loaded with heavy stones of 40 or 50 pounds in weight to prevent escape, and then marched. . .to the sea, sometimes hundreds of miles. . .On the ships the slaves were packed in the hold on galleries one above the other. Each was given only four or five feet in length and two or three feet in height, so they could neither lie at full length or sit upright. . .The close proximity of so many naked human beings, their bruised and festering flesh, the foetid air, the prevailing dysentery, the accumulation of filth, turned these holds into a hell. . .

> [The slaves] undertook vast hunger strikes; undid their chains and hurled themselves on the crew in futile attempts at insurrection. . .Fear of their cargo bred a savage cruelty in the crew. One captain, to strike terror into the rest, killed a slave and dividing his heart, liver, and entrails into 300 pieces made each of the slaves eat one. . .Such incidents were not rare. . .When the ship reached the harbour, the cargo came up on deck to be bought. . .

> The stranger in San Domingo was awakened by the cacks of the whip, the stifled cries, and the heavy groans of the Negroes who saw the sun rise only to curse it for its renewal of their labours and their pains. . .Worked like animals, the slaves were housed like animals. . . (pp. 6–10)

Given the shear magnitude of cruelty and brutality that was part and parcel of this system of wealth extraction resulting in the genocide of more than 60 million Africans, it is no wonder that resistance and insurrection became a central component of slave life, leading to many revolts and uprisings. To combat this culture *of* and tendency *toward* emancipatory movement, the slavers engaged in psychological warfare. That is, through the enslaving process, which is required with every new generation so it is ongoing, African knowledge and philosophy and the history of

struggle and resistance have been subjugated, that is, pushed down, oppressed, and disrespected by Western scholars and functionaries.

Slavery, that is, was not just an economic system, it was a social system designed to teach Africans, and all other members of society, especially the white and *Mulatto* managing classes, to hate everything African, including the African body, as inferior, savage, and barbaric compared to the European body and model of Western civilization (much of which can be traced to ancient Black Egypt). The purpose was to control the enslaved African not just physically, but psychologically. As a result of this ongoing process, today many people, even black people, believe that Africa and black culture more generally are inferior, savage, and wild. W.E.B. DuBois (2001) argues that this painfully tragic self-hating conditioning successfully limits Black resistance because many black people do not value themselves and their African heritage. Commenting on the self-destructive implications of this conditioning he experienced during his work in the United States developing a Pan-African Movement in 1960, DuBois (2001) notes that "most of them [African Americans] resented it as being a 'back to African' movement" (p. 194). Similarly, reflecting on the current implications of this cultural genocide and indoctrination, critical educator, Pierre Orelus (2007), notes that

> The material disaster that came along with colonization is not as profound as the psychological scar it has caused "postcolonial" subjects. The legacy of western politics of coloniality, i.e., forcible ownership of the colonized's territorial space paired up with an ideological running machine put in place to control their mind, has been carried over in the neocolonial and neoliberal era. . . (p. xi)

While healing and mending the damage Orelus speaks of is central to our critical pedagogical project, he continues, reminding us of the long and rich tradition of resistance among colonized, oppressed, and formerly enslaved peoples. It is within this spirit of resistance, thriving in the Americas at least since the Arawaks encountered Columbus, as noted above, that we are interested in because of its significance on the world stage. Again, arguably one of the most significant of these examples regarding our conceptualization of critical pedagogy is the Haitian war of independence (Chomsky, Farmer, & Goodman, 2004; Farmer, 1994; Trouillot, 1995).

Michel-Rolph Trouillot (1995), in *Silencing the Past: Power and the Production of History*, challenges traditional conceptions of the Haitian Revolution, both favorable (i.e., pro-Haitian) and unfavorable (i.e., pro-French), noting that "both groups mention only in passing that the Haitian war of independence involved more than two camps" (p. 40). In other words, Trouillot (1995) argues that the struggle was not just a struggle between the enslaving, colonialist French and the enslaved Africans and "black Creoles (i.e., natives of the island or of the Caribbean)" (p. 40). Trouillot (1995), rather, speaks of "a war within a war" drawing a distinction between what he calls the "new revolutionary hierarchy" and those "former slaves" who "refused to submit" (p. 43) to them or to the French.

Trouillot (1995), drawing on the example of one of these "dissidents," Jean-Baptiste Sans Souci, describes how he fought against those who have traditionally

been celebrated as leaders of the Haitian Revolution from Christophe to Dessalines. Sans Souci, it is argued, had a difficult time viewing these figures as comrades because, at a particular stage in the development of the long revolutionary movement, they had sided and fought with the French against the English, Spanish, and *dissidents*. Making this point Trouillot (1995) argues that Sans Souci "would not serve under men whose allegiance to the cause of freedom was, at the very least, dubious" (p. 43). However, according to Trouillot's (1995) account, the fate of Sans Souci was sealed when "within a few weeks, the Creole generals defeated or won out over most of the dissidents. Sans Souci resisted longer than most but eventually agreed to negotiations. . .about his role in the new hierarchy" (Trouilott, 1995, p. 43).

James (1963) contextualizes this *war within a war* as between the vast majority of enslaved and savagely brutalized Africans and an elite few who comprised a privileged caste serving as the managers of the vast majority and subsequently tending to view themselves as superior to *the average slave*. However, not all members of this small class of privileged slaves operated as mere instruments of empire. There were "a few of these who used their position to cultivate themselves, to gain a little education, to learn all they could. The leaders of the revolution are usually those who have been able to profit by the cultural advantages of the system they are attacking, and the San Domingo revolution was no exception to this rule" (p. 19). One of the central figures of the Haitian Revolution, Toussaint L'Ouverture, son of an African chieftain, who chose to stand with *the masses*, was no exception. Consequently, L'Ouverture's "is now a timeless symbol of freedom" (p. vii) according to the first democratically elected President of Haiti, Dr. Jean-Bertrand Aristide (2008). Further contextualizing him as truly for the people despite his privileged background and the fact that he had already gained his own personal independence before 1791 Aristide (2008) continues

> Toussaint himself was already free; nevertheless he opted to stand with the masses, those who had been reduced to the property of their masters. Toussaint could not fully enjoy his own liberty; he shared the suffering of those who were still victims of slavery. For him to be fully free—and to feel fully free—all enslaved persons had to be free. . .Toussaint's vision of liberty was universal at a time when France sought to exploit the divisions (real and created) between the coloured and slave communities. . .Though he was not an instigator of the rebellion, Toussaint followed the will and interests of the slaves. . .The insurrection needed his leadership, and he created an ouverture (opening) towards freedom. (pp. x–xi)

Toussaint's revolutionary example of genuine solidarity would inspire, directly and indirectly, countless struggles and critical pedagogies for generations to come. His refusal to accept the hierarchy his social position prescribed has had lasting impacts and can be seen in the extraordinary revolutionary lives of Fidel Castro (James, 1963), Ché Guevara, Subcomandante Marcos of the Zapatistas, and others, most of whom came from the middle, specialized classes of their respective countries. In what was his first public proclamation, delivered from Camp Turel in 1793, Toussant L'Ouverture (2008) announced his alignment with the notion of *general liberty*, which would radicalize the French Revolution demanding blacks be included within

its conceptualization of the *Rights of Man and Citizen* noting that "I want liberty and equality to reign in St.-Domingue…You say that you are fighting for liberty and equality? Is it possible that we could destroy ourselves, one against the other, and all fighting for the same cause?…Equality cannot exist without liberty. And for liberty to exist, we must have unity" (pp. 1–2). Again, this notion of universal liberation would reemerge over and over as its aim has yet to be fulfilled.

This attention to complexity is particularly important for our critical pedagogy because the world we inhabit and the struggles against dominant forms of power are characterized by similar seemingly contradictory alliances and *internal* struggles. Paulo Freire (1998), in *Pedagogy of the Oppressed*, describes this complexity as the result of the oppressed internalizing the values and structures (i.e., the hierarchy of slave society) of the oppressors. Consequently, when the oppressed achieve independence, they too often reproduce the structures of domination because of the history of having been subjected to the oppressor's enslaving indoctrination. Making this point Freire (1998) argues that "during the initial stage of the struggle, the oppressed, instead of striving for liberation, tend themselves to become oppressors… Their ideal is to be men; but for them, to be men is to be oppressors" (p. 27). As a result, revolutionary movements almost always involve many *sides* and competing interests (Malott, 2008). The traditional binary between the oppressed and the oppressors is therefore inadequate for explaining the totality of social experience within past *and* present colonialist/neo-colonialist/imperialist/capitalist contexts.

This insight is particularly important for not only white educators striving to be part of the struggle for social justice, but all educators, and thus, for our critical pedagogy in the twenty-first century. Far too often when privileged (especially whites) progressives attempt to work with traditionally oppressed communities for social justice, we throw up our hands paralyzed by the possibility of unknowingly reproducing Euro-centric practices and take the position, *just tell us what you want us to do*. Because many oppressed people have internalized the same dominant discourse as white people, taking a *hands-off* approach too often leads to reproducing the same neoliberal capitalist power structure, although perhaps a little more culturally sensitive.

On another level, the first *principle* of critical pedagogy is refusing to forfeit one's political agency and intellectual autonomy—this is something that is not merely *told* to students, but it is *demonstrated* by educators living their practice. The responsibility of the critical educator is therefore to be able to determine if a particular action, point of view, curriculum, or pedagogy supports the basic structures of power or resists them—no matter *who* or *where* they are coming from. The *hands-off* approach is also paternalistic and disrespectful in its own right suggesting an inability for genuine solidarity, collaboration, and cooperation. These lessons, as we observe below, unfortunately continue to be informative within this most contemporary era.

However, from the boss' point of view, the internal structure of the revolution is irrelevant—democratic *or* authoritarian. As long as the wealth and profits are no

longer flowing to the imperialist profiteers, the *bosses* are not happy. The Haitian Revolution did not end the process of imperialist wealth extraction, but it did remove Haiti from the imperialist system, a monumental feat in itself. Consequently, European importers simply quit importing sugarcane from Haiti effectively transferring production to Cuba and leaving the Haitian people destitute with no market to sell their produce. Making this point internationally renowned critical historian and African-American studies professor, Manning Marable (1996), observes that "Haiti's successful slave revolution of 1790–1804 inspired Cuban sugar producers to take over the world sugar market and ironically enlarged and extended the life of slavery in this process" (p. 176). Marable (1996) continues noting that Cuban sugar production increased more than 40 times between 1775 and 1865 while British imports from Cuba increased more than sixfold between 1817 and 1832. This point is important because it demonstrates the interconnectedness of this system of commerce that has dominated since 1492 when it truly became global, incorporating, through physical and ideological conquest and genocide, the entire world.

The Creole Revolution that gave birth to the black Republic of Haiti in 1804, from the perspective of the United States' ruling elite, when not ignored, has nevertheless tended to be portrayed in a negative light. The US government and the slaveholding elite, terrified that Haitian independence would inspire American blacks to pursue a similar course of action, refused to acknowledge their republic for more than 60 years after its emergence. Consequently, in the West, "scholarly commentary on Haiti has tended to depict the country as isolated and disconnected—a static country of backward peasants caught in a time warp" (Farmer, 1994, p. 56). However, because Haiti is a product of the Columbian conquest, depopulation, and repopulation of the Caribbean Basin and the Americas, portraying Haiti as isolated is "a feat of Herculean oversight, given that Haiti is the creation of expanionist European empires—a quintessentially Western entity" (Farmer, 1994, p. 56).

Depicting Haiti as caught in a time warp, as Farmer suggests, ignores the history of US foreign imperialist policy that led to the United States being the richest country and Haiti the poorest in the hemisphere. To this day, the depiction of Haiti within US dominant society—a country where African culture thrives—Euro-centrically and paternalistically suggests that the Haitian people are ignorant, savage, backward, and in need of US intervention. Commenting on the relationship between the United States and Haiti, renowned Haitian historian and co-founder of Partners in Health, Paul Farmer (1994), notes

> The United States and Haiti are something other than the richest and poorest countries in the hemisphere; they are also its two oldest republics. Rarely, in fact, have two countries been as closely linked as the United States and Haiti. Haitians are, by and large, fully aware of this historical fact. But citizens of the United States are, by and large, oblivious to these links—ignorant, even, of the two-decade U.S. military occupation of Haiti earlier in this century. This disparity of awareness has led Haitians to adopt a moral and analytic explanatory framework that differs substantially from that of Americans. U.S. journalists and even certain scholarly investigators, manifestly uninformed about the history of U.S.–Haitian relations, have mistaken this awareness as a Hatian tendency to paranoia. (pp. 46–47)

This tendency toward a social justice-oriented "moral and analytic framework" represents the vision of critical pedagogy that we are particularly interested in here. We can use this critical lens to analyze the current tragedy, the earthquake, which has devastated one of the oldest republics in the hemisphere. Understanding how this tragedy could have been prevented requires us to understand how the richest slave colony became the poorest country in the hemisphere after the revolution. Through our investigation we learn that the history of US interventionism in Haiti since the 1915 Marine occupation that lasted until 1934—19 years—has been designed to strangle the country for daring to be both African *and* free in the Western hemisphere (Chomsky, 2004). Chomsky (2004) points out that the United States, in their efforts to erode Haitian sovereignty, has gone so far as to support "France's insistence that Haiti pay a huge indemnity for the crime of liberating itself" (p. 3) two centuries earlier. However, this story is one of many not covered by the mainstream, corporate media—that is, the ongoing effects of colonialist imperialism, which has never been just about Haiti.

What is particularly disturbing about the recent media coverage regarding the US response to the disaster in Port Au Prince is the overt paternalism. Rather than situating the tragedy in an historical context, which could lead to real progress in support of Haitian sovereignty (which the United States has waged war against since 1803 and before, as noted above), the US media has paternalistically treated the Haitians as ignorant, immoral savages that need pity from their white, Western superiors. It is grotesque, but privileged North Americans (and others) bask in it because it makes the unjustly privileged feel good and morally righteous. However, such concern rings hollow given the long history of US foreign policy, couched in similar paternalistic discourse, mentioned above. Again, a brief summary is instructive:

- Shortly after gaining their own independence in 1776, the American Republic aided European powers in assisting "France's violent repression of Haiti's slave rebellion" (Chomsky, 1994, p. 16). After the success of the rebellion, the United States, according to Chomsky (1994) "exceeded all others in the harshness of its reaction, refusing to recognize Haiti until 1862" (p. 16). After this period of what amounted to a series of economic sanctions, Haiti became an object of political manipulation by US leaders (see Chsomky, 1994; James, 1963).
- Marines invade and occupy the country for 19 years between 1915 and 1934. Summarizing this event, Chomsky (1994) notes that "numerous U.S. interventions culminated in Woodrow Wilson's invasion of Haiti and the Dominican Republic" where his terrorizing troops murderously and viciously "reinstituted virtual slavery [and] dismantled the constitutional system" because Haitians "were unwilling to turn their country into a U.S. plantation" (p. 17). The US occupying force also "established the National Guards that ran the countries by violence and terror after the Marines finally left" (Chomsky, 1994, p. 17). However, as James Loewen (1995) notes in his analysis of high school level US history textbooks in *Lies My Teacher Told Me*, most texts "do not even mention Wilson's takeover of Haiti" (p. 25). When they do mention the invasion and

subsequent nearly two-decades-long occupation, its significance and criminality are *always* diminished. For example, in *The American Nation* (2000), by James West Davidson, Pedro Castillo, and Michael Stoff, "Woodrow Wilson . . . disliked the heavy-handed foreign policy of his predecessors. He proposed instead a policy of moral diplomacy" (p. 636). After offering this bold, and arguably false or misleading statement, the authors casually comment that "nevertheless, Wilson ordered military intervention. . .more than any other president" (p. 636). This statement alone should cause series concern. However, these passages were embedded within the only three short paragraphs dedicated to the topic. Consequently, most US citizens remain in the dark on these and other matters.

- Marines invade and occupy Haiti for 4 years between 1959 and 1963. After a group of Haitians and Cubans attempted "to overthrow the tyrannical Haitian government" of US-appointed Francois "Papa Doc" Duvalier, the United States again sent troops into Haiti to support the murderous leader friendly to US corporate interests. Summarizing this history—a history overwhelmingly subjugated within the United States—former US State Department employee gone staunch critic, William Blum (1995), in *Killing Hope: U.S. Military and CIA Interventions Since World War II*, notes that "the initial reaction of the Duvalier government was one of panic, and the police began rounding up opposition sympathizers" (p. 145). Blum (1995) continues, explaining, "it was at this point that the U.S. military . . . stepped in. The Americans instituted an air and sea reconnaissance to locate the rebels. Haitian soldiers, accompanied by U.S. Marines, were airlifted to the area and went to battle with them" (p. 145). Consequently, the rebel attempt to regain control of their country was subverted.

- The removal of democratically elected Prime Minister Aristide in 1994 and again in 2004. The election of Aristide in 1990, a liberation theologist and true economic and social proponent of the people, signaled a *crisis of democracy* for US corporate interests committed to their version of *stability* and *trade relations*. Making this point Chomsky (2004) notes that "Washington was appalled by the election of a populist candidate with a grass-roots constituency just as it had been appalled by the prospect of the hemisphere's first free country on its doorstep two centries earlier" (p. 3). That is, a Haitian government dedicated to repressing their own population to ensure profits and wealth continue to flow to foreign (i.e., the United States) corporate interests has *stability*, according to dominant forms of global power. Paradoxically, a country with a democratically elected government supporting policies that ensure wealth and profits benefit the people whose labor produced them before a foreign and domestic elite few, according to the doctrinal, hegemonic system, is *unstable* and therefore in need of outside intervention to *bring stability to the region*. This is the basic formula that informs the upside down world of corporate propaganda where authoritarianism is democracy and democracy is authoritarianism. Underscoring the insanity of this logic, Chomsky (2004) summarizes the perspective of US President Bill Clinton in 1991: "the threat of democracy can be overcome if economic sovereignty is eliminated" (p. 8). Because of the extreme deceptiveness of this reasoning, US

policymakers and corporate media have consistently named their aggressive, illegal military interventions into Haiti (among many other countries) as "saintly" and "noble" (Chomsky, 2004). This propaganda perpetuates the paternalism of white supremacy that depicts the United States as the white savior of a child-like Haiti. This formula has been particularly prevalent within the US corporate media since the recent earthquake tragedy devastated the country, discussed below.

- Another category of US foreign policy includes international trade policies. In the current era, these policies have been termed *neoliberal*, because they are aimed at *liberalizing* trade by *deregulating* it. Structural adjustment and neoliberal trade policies allow Walt Disney, Wall Mart, and other multinational corporations to treat Haiti like their own personal plantation.

The elite, paternalistic perspective is that the third world is poor and suffering because the people who live there are inferior and lazy. When disaster strikes the West therefore a-historically thinks that the so-called third world *is lucky the West exists. This discourse is treated as a presupposition. That is, it is not said outright, but it is the message that is transmitted. It was perhaps symbolic of this overall message that the days immediately following the disaster one of the biggest news stories on the networks was the white, Christian adoptions agencies' efforts to* rescue *the Haitian orphans they had been in the process of adopting before the earthquake. This* story *has been used as the symbol of the white, Western,* benevolent father as savior of the inferior savages *discourse. It is perhaps equally symbolic that the Media's focus on orphans imploded on itself as a group of* real *Christian missionaries were caught by Haitian authorities smuggling children out of the country without proper paperwork. However, many of the children were* not *actually orphans as the missionaries claimed they were. They were* just *poor. The assumption, again, is paternalistic. It is the old white man's burden discourse of* saving the inferiors from themselves. *It would be easy to focus on the missionaries themselves as the source of the problem. However, such an emphasis is short sighted. That is, the missionaries themselves are the product of the larger white supremacist paternalism that dominates US policy, media, and consumer culture.*

The ongoing relief and recovery efforts are therefore not examples of genuine solidarity and doing good *but rather hypocrisy intended to lend legitimacy for perpetuating the system, as it exists. That is, once the dust settles, rather than backing off and allowing people to create something for themselves, US force and corporate interests will be back in full swing extracting wealth and* doing them a favor *by* giving them a job.

Conclusion: The Emergence of Academic Critical Pedagogy

Every democratic movement, revolution, and critical tradition (from Marxism to post-modernism), it can be argued that emerged out of Europe (i.e., the French Revolution) and from within its many settler-state societies, such as the United

States (i.e., the American Revolutionary War), are products (some directly, some indirectly) of the sixteenth and seventeenth century Enlightenment. Before *The Enlightenment* European societies, in general, were too steeped in religious dogma and divine-right hierarchy for counter-hegemonic activity to develop among the vast oppressed peasant populations. The Enlightenment, contrary to popular opinion, was a direct result of "the colonization of the Americas and the engagement with her peoples" which "opened an intellectual floodgate that stimulated dramatic changes in the way Europeans viewed the world" (Lyons, 1992, p. 31). Lyons (1992) looks specifically to the French Jesuit Missionaries (not slavers) who, he contends, "more than colonists from other major countries, joined the Indians on the Indians' terms" (p. 27). The year this relationship really began to take hold, according to Lyons (1992), was 1608 when Champlain successfully established a trading settlement in Quebec. Outlining the cultural diffusion that ensued Lyons comments

> . . .The Jesuits brought the stories about adventures with Indians to France in great detail and complexity. Some Jesuit writers elaborated on the theme of the 'noble savage,' and pointed to numerous advantages of Indian life, including examples of the freedom of the individual. In general, the Jesuit writings helped to inform a growing intellectual movement in France that would build upon the ideals of egalitarianism and the dignity of the individual. (p. 28)

Again, one of the unintended consequences of the Columbian and European conquest and colonization of the Americans was this diffusion of democratic ideals and practices from Native North America to Europe. Another major influence on the European Enlightenment was the enslaved Africans charging their *enlightened* Western oppressors with obvious hypocrisy, which, in Haiti, for a number of geographical and political reasons, successfully culminated in a fierce revolution against French slavers resulting in "the first nation in the world arguing for universal freedom for all mankind" (Chomsky, 2004, p. 3). This is significant because critical pedagogy is a carrier of this long tradition of generating movement toward *universal freedom*. Revolutionary–academic critical pedagogues can therefore look with pride to Toussaint and the Haitian Revolution as pioneers in the struggle we are a part of.

Another source playing a central role in paving the epistemological path for *The Enlightenment* and, eventually, critical pedagogy, was *The Renaissance* emerging out of southern Europe in Spain where the civilizing Islamic Moors had the greatest intellectual and cultural influence during Europe's Dark Ages until the *Reconquista* in 1492. A central figure of this movement, Galileo Galilei, embodied *the democratic habits of the scientific mind* (Malott et al., 2009). The fierce independence of Galileo, as suggested above, can be understood, in part, within this context of European exposure to, and atrocities against, American indigeneity. W.E.B. DuBois (2001), for obvious reasons, in 1908, took note of the genius of Galileo commenting, "judge this world genius not simply by the things he learned, but rather by the ignorance of his age" (p. 36). Summarizing Galileo's "impulse" as "a new vision of the world," which he was persecuted for in his Italian homeland, DuBois (2001) reminds his readers of the importance of context in education.

Taking this analytical framework and applying it to his own context, DuBois (2001), in 1960, asks his audience if "equal rights" for "the American Negro" will mean "we simply adopt the ideals of Americans and become what they are or want to be?" (p. 193). Opposing this dominant class desire for assimilation, DuBois (2001) correctly argues that a truly contextualized education must include, along with "the utter disappearance of color discrimination in American life" but also "the preservation of African history and culture" including "slavery and the slave trade, and the struggle for emancipation" (pp. 195–196).

From this point of view we can begin to understand why critical pedagogy owes so much of its brilliance to *The Enlightenment*, Native North America, and the struggles of enslaved Africans throughout the Americas and the Caribbean Basin. However, even in their most recent and progressive form, our US history textbooks tend to continue to attempt to belittle the revolutionary agency and critical praxis of the enslaved masses fighting for their rights, by making such deceptive claims as, "inspired by the French Revolution, the African slaves in Haiti decided to fight for their liberty" (Davidson, Castillo, & Stoff, 2000, p. 270). While it is true that the French Revolution had an impact on the hundreds of thousands of Africans enslaved by French profiteers, such a narrow focus ignores the long legacy of critical agency and resistance that preceded the French Revolution by centuries.

Consequently, high school history textbooks, and capitalist schooling more generally, perpetuates the old racial hierarchies of *the white mans' burden* by attributing the creation of useful *ideas* to European sources, leaving, in this case, Africans, as mere *beneficiaries* of European accomplishments. In other words, what is reproduced here is the old justification for slavery—that Africans are lucky to be around Europeans, which, it is argued, justifies the *unpleasantness* of slavery. It is this ideology—the ideology of *the white mans' burden*—that positions slavery and colonization as painful favors embodied in the sentiment, *you may hate me now for what I am doing to you, but you will thank me in the long run*—that continues to inform the violent destructiveness of neoliberal, global capitalism.

This so-called *logic* or paternalistic *tough-love* attitude also continues to be the perspective of capitalist schooling. It assumes that students, teachers, and even administrators are too stupid to realize how the *back-to-the-basics* movement, the complete dominance of high-stakes standardized testing over the curriculum, and the privatization of schools will benefit them in a far away magical land where *freedom* is actually an authoritarian regimentation of complete dominance. It is based on the neoliberal assumption advanced by Milton Friedman that human intelligence is naturally distributed hierarchically rendering competitive capitalism the system that most closely matches humanity's natural state. From this point of view any attempt to create a society based on equality and equity will both limit the freedom of the naturally superior to rise to their predetermined place of dominance and provide the naturally inferior undue and thus dangerous decision-making power. What this points to is ruling class's historical tendency to fear the democratic impulses of the masses.

Chapter 7
Academic Critical Pedagogy: Critical Pedagogy in the Contemporary Context

Within this chapter the contemporary theoretical and concrete contexts of academic critical pedagogy (defined in Chapter 5) are explored. While there are many obvious overlaps between revolutionary and academic critical pedagogy, especially since they are part of the same historically developing process, we specifically focus on the era beginning around the turn of the last century and the two world wars. That is, because contemporary critical pedagogues tend to locate the theoretical foundations of their tradition within the critical theory developed around this time, we too will begin our discussion of academic critical pedagogy within this *modern* era.

Reflecting on what the previously mentioned early Native North American and Afro-Caribbean roots of critical pedagogy would eventually flower into, theoretically, we can now offer another brief historical link between revolutionary and academic critical pedagogy. Again, the never before seen vast fortunes amassed by European ruling classes through the colonization of the Americas and the trans-Atlantic slave trade provided the material basis for what became an industrial revolution. Ideologically, western, hegemonic philosophy and psychology (see Chapter 1) would provide the worldview and technological innovation for the accumulating, dominating, reductive, and destructive impulse of industrialization. What began to emerge around the beginning of the twentieth century was therefore a more unified, technologically developed, global economic system that led the world's ruling classes to violent confrontations or wars for dominance.

Consequently, World Wars I and II are manifestations of this competition, which, themselves, were value-generating ventures. For example, the business of producing the tools of war alone is a multi-trillion dollar enterprise. Such wars can be understood as part of the same process of global domination and wealth extraction that began in 1492 by Columbus (see Chapter 5) where working class labor powers from around the world have been employed by ruling class governments and monarchies to do the work of the imperialist soldier—that is, to kill and die for the interests not of the people, but in the interests of the bosses. The critical theories that emerged out of this context, in the modern, industrial, capitalist dominated era, are the theories that today's critical pedagogues tend to point to as the theoretical roots of their own approaches. We can therefore now turn to more contemporary manifestations of critical pedagogy.

The origins of contemporary critical pedagogy in North America tend to be traced back to two primary sources—the late Brazilian educator, Paulo Freire, and German critical thinkers of the Frankfurt School, whose most influential and well-known place of departure can arguably be traced to the Italian neo-Marxist Antonio Gramsci. Henry Giroux brought these two general influences together during the early 1980s resulting in the emergence of the very term *critical pedagogy* itself. What follows is therefore a brief review of Gramsci, the Frankfurt School, and then Freire. This discussion will be followed by a review of Giroux, Kincheloe, McLaren, and other critical pedagogues as representing the tradition coming of age. The next section in this chapter will highlight critical pedagogy in the twenty-first century as defined by a new generation of scholars (see Malott & Porfilio, 2010). I then summarize some of the major concepts of critical pedagogy followed by a short review of critical critiques of critical pedagogy.

Gramsci

Antonio Gramsci was an Italian activist and a cutting-edge Marxist who, despite being elected to Parliament, was imprisoned during World War I by Italy's Mussolini government, the worlds' first fascist government. While in prison, where he died before serving his entire 20-year sentence, he was recognized for his insights and discussions on hegemony and counter-hegemony (see below), which continue to be widely cited within much of the scholarly work in critical pedagogy/theory. That is, Gramsci's work reflects an awareness of a more complete shift in the reproduction of dominant forms of power from brute force and primitive accumulation (i.e., Columbus, slavery, etc.) to ideological indoctrination (i.e., media indoctrination and capitalist schooling) or *hegemony*. Hegemony's internal drive is to manufacture the necessary consent required for the exploited working classes to view the bosses perspective, such as capitalism represents the natural distribution of human intelligence and drive, as normal and natural and thus *just the way it is*, and therefore in no need of transformation or resistance. Where Marx and others pointed to the role of government policy and force and the ideological reproductive force of the means of production itself, Gramsci focused on the role of culture as the central hegemonic tool needed to convince people that situations and arrangements (i.e., the labor/capitalist relationship) that harm them are actually beneficial saving them from even more detrimental conditions.

Because this culture-based ideological approach to reproducing dominant forms of ruling elite power continues to thrive in neoliberal global capitalist societies, Gramsci's insights remain potent (Kincheloe, 2008a). That is, in today's North American context right wing politicos often draw on the culture of Christianity to convince increasingly poor and angry whites that the source of their problems are not the multinational corporations, such as General Motors and General Electric, who engage in union-busting, anti-worker policies, because these companies are run and operated by hardworking, good Christian citizens. Rather, we are repeatedly

told by right wing, reactionary Republicans, Democrats, and now Tea Party pundits, such as Bill O'Reilly and Sarah Palin, that the enemy of hardworking Americans (i.e., white Christians) are not the bosses, but anti-Christian feminists, homosexuals, immigrants, blacks, intellectuals, and just about anybody else who might happen to make a convenient target (Kincheloe, 2008a).

In schools this cultural hegemony has resulted in repeated attacks on multicultural education, bilingual education, affirmative action, and anything that might pose a challenge, however slight, to white, male, pro-capitalist, English-only, Eurocentric domination. Gramsci therefore argued that this culturally, conservative hegemony, when present, demands counter-hegemony. The need for intellectuals within this context is therefore crucial for challenging the deep web of deceit and the profound negative implications of on the human psyche and identity. Gramsci's vision was that of the organic intellectual whose leadership naturally grew out of their experience in and challenge to the hegemony. Such figures need not be professionally trained intellectuals, but organically develop sophisticated analyses and pedagogies as a result of reflecting on their experiences within their occupational contexts such as factory workers, teachers, inmates, and others who depend on a wage, in some form or another, to survive.

While Gramsci's work continues to influence critical scholarship and practice, as argued above, he has not gone unchallenged within contemporary manifestations of the critical movement he was a part of. For example, anarchist scholar Richard Day (2005) challenges the whole Marxist/neo-Marxist tradition from which Gramsci is situated. Day (2005) argues that the focus on government intervention within this ideology has led to a hegemony of locking itself out of relevancy. Day (2005) points to the new anarchist social movements that have responded to neoliberal capitalism with a watershed of independent, critical, non-governmentally affiliated strategies and tactics posing a significant challenge to the global structures of power.

Another challenge has come from the anarchist work of Noam Chomsky (1976/1987) who has argued that the critical tradition has limited itself and its potential by endorsing a naïve environmentalism ignoring the biological context of the human being. By environmentalism, Chomsky (1976/1987) refers to the tendency to attribute all human variability and uniqueness to environmental or social factors and contexts. Focusing specifically on the environmentalism of Gramsci, Chomsky quotes the famed martyr as arguing that

> The fundamental innovation introduced by Marxism into the science of politics and history is the proof that there does not exist an abstract, fixed and immutable "human nature" . . . but that human nature is the totality of historically determined social relations (Gramsci quoted in Chomsky, 1976/1987, p. 196)

The challenge Chomsky poses here to the critical tradition is the tendency to view the brain as a blank slate, the contents of which are either externally imposed, as the behaviorists contend, or are the product of a more active, constructive process, as critical pedagogues and constructivists hold. Rather than a blank slate, Chomsky's (1976/1987) radically democratic scientific point of view has led him to conclude that

> The human brain is unique in many respects, and the mental structures that grow under the boundary conditions set by experience—the cognitive structures that are "learned," to employ the common and I think rather misleading locution—also provide humans with a "unique instrument." But it is difficult to imagine that this "uniqueness" resides in the total absence of structure, despite the antiquity of such a belief and its remarkable grip on the modern imagination. What little we know about the human brain and about human cognitive structures suggests a very different assumption: a highly constrained genetic program determines the basic structural properties of our "mental organs," thus making it possible for us to attain rich and intricate systems of knowledge and belief in a uniform manner on the basis of quite limited evidence. (p. 197)

Chomsky (1976/1987) argues that there is nothing controversial is acknowledging that, like every other species, humans too have biologically determined cognitive limits and endowments, and that being attuned to this context can offer counter-hegemonic movement significant advantages. For example, Chomsky's line of reasoning here enables us to move, with the authority of science, from the endless discussions concerning the inflated significance of human cognitive variability to the much more significant, and potentially democratizing, cognitive similarities *within* the species in general. While Gramsci's analysis of the importance of culture remains highly relevant, Chomsky's work allows us to find counter-hegemonic strength within the biological context of mental properties.

Frankfurt School

Several decades after Gramsci, in the midst of the next violent, ruling class confrontation for world dominance, World War II, scholars at the Frankfurt School in Germany continued to develop the critical tradition as an ongoing process of theoretical development. Extending Gramsci's cultural insights regarding the role of ideas and control in reproducing social systems of oppression where the vast majority come to support the interests of the dominating or profiteering classes giving way to theories of complexity absent within the old binaries of *us* and *them* or oppressors and the oppressed. In other words, one of the most common consequences of ideological indoctrination is segments of the working and middle classes fully supporting the interests of the capitalist class resulting in many *curious* or *dark* alliances (Malott, 2008). While the Frankfurt School theorists' commitment to extending the field prevented the emergence of a "fully articulated philosophy," there were, nevertheless, common threads honed in on by formative critical pedagogues, such as, "the newly emerging forms of capitalism along with the changing forms of domination that accompanied them" (Giroux, 2009, p. 27).

Frankfurt School scholars, such as Adorno, Marcuse, and others, were skeptical of the Enlightenment's promises of human progress and social justice as the natural result of reason and the scientific method due to their general sense of hopelessness and cynicism engendered by the working class' support of Nazism, Fascism, and World War II, all of which relied heavily on the grand narratives of science and a rhetoric of social progress and the common good—a thorough

cooptation of Enlightenment rhetoric. Informing their skepticism was what they interpreted to be the use of the concept and scientific method of 'reason' for not only *good* but oppression as well—part of the process of turning the oppressed on themselves rendering the dualistic analysis of oppressed and opperssors redundant. Summarizing the critiques of modernism that animated the post-World War II minds of the Frankfurt School scholars, Brosio (2000) observes that, "they realized that the Enlightenment's championing of reason included a dichotomy that threatened its stability. They worried about how 'objectivist' science could be guided by 'subjectivist' moral claims" (p. 97).

As argued in Chapter 1, Frankfurt School scholars looked to Freud and others to better understand the psychological processes and consequences of an emerging global system of exploitation maintained and perpetuated not only through physical force, but, more significantly, through a system of ideological indoctrination. Freud helped Frankfurt School cultural workers come to terms with the implications of a propaganda society. That is, a social order grounded in deception inevitably leads to a sick society, and a sick society produces psychologically sick citizens. This sickness is the hallmark of modern industrial society and explains why working people so often support the interests of the capitalist class at the expense of their own class interests. Simply stated, this system is a system of marketing and advertising. Working people are socialized into a culture where work is a religion. Conservative politicians present their policies within this framework appealing to working class sensibilities and toughness. For example, the conservative, corporate-backed movement in the United States and elsewhere has attacked the labor movement and unions accusing them of supporting a welfare state engendering dependency and weakness rather than toughness and rugged individualism.

Again, these trends result in a social/political complexity where working class identity is intimately tied to corporate interests. Issues of gender, language, and race/ethnicity only compound the complexity in diverse settler societies such as the United States. For example, scientifically ungrounded and unfounded arguments that Spanish and bilingual education programs hurt immigrant students, Latinas/os in particular, by serving as a crutch that prevents them from learning English thereby thwarting their opportunities to succeed within the society that exists, resulted in Latinos/as voting English-only laws into existence in California and Arizona. As a result, Latina/o dropout or push-out rates have increased as the language needs of many students go unmet, which academically rigorous studies predicted (see García, 2009).

Giroux (2009) underscores the analytical framework employed here to understand the role of ideas in manufacturing consent noting that, "the Frankfurt School took as one of its central values a commitment to penetrate the world of objective appearances to expose the underlying social relationships they often conceal" (p. 27). It was therefore the Frankfurt school that more fully transcended the limits of traditional Marxism's focus on economic relations moving ever deeper into the realm of popular culture and discourse as an increasingly significant realm where the minds of men and women are conditioned to serve the interests of an elite few. However, reflecting the Nazi context in which they worked, the Frankfurt School has

been critiqued for down playing agency or counter-hegemony, that is, the existence of critical, transformative resistance.

Freire

It is this focus on human agency stemming from a deep commitment to the confidence in humanity that has made the work of Paulo Freire so important to the ascendency of critical pedagogy. Freire was born in Recife Brazil in 1921 and grew up in a *peasant* community, which he intimately understood as informing his central identity thereby influencing all of his academic work. This awareness led him to reject the scientific claim of objectivity, which he understood has historically playing a central role in the colonization process. Again, coming of age in Brazil after World War II, Freire was intimately aware of the global and local manifestations of imperialist power.

In other words, Freire's pedagogy was a direct response to Brazil's widespread poverty and human suffering that is largely a product of the imperialist tendencies of US global capitalism. For example, the United States' influence over Brazilian politics began in 1945 when the US began to use Brazil as "'a testing area for modern scientific methods of industrial development based solidly on capitalism'" (Chomsky, 1999, p. 27). These tests were extremely beneficial to the wealthy of Brazil and the United States, but terrible for the majority of Brazilians. As a result, some years later, "... the World Bank reported that two-thirds of the population did not have enough food for normal physical activity" (Chomsky, 1999, p. 27). If this were not enough, the Brazilian military coup of the 1960s was supported by the Kennedy administration as a "victory of freedom" that should "create a greatly improved climate for private investments" (Chomsky, 1999, p. 49). Consequently, by 1989 Brazilian wages were among the lowest in the world dropping as much as 20% in 1 year (Chomsky, 1999). It was in this context that Paulo Freire set out to develop a pedagogy designed to facilitate the political awakening of Brazil's most oppressed *peasant* class.

What emerged was what has come to be a classic text in educational theory, *Pedagogy of the Oppressed* (1970). It is widely accepted by Marxists, critical race theorists, and postmodernists alike that *Pedagogy of the Oppressed* influenced, in significant ways, the current movement known as *critical pedagogy*. This text laid the theoretical foundation for replacing dominant forms of education with an education for liberation. *Pedagogy of the Oppressed* therefore takes as its place of departure a critique of what Freire called a banking model of education.

For Freire the banking model is a domesticating education that treats the act of teaching/learning as a hierarchical one-way street where the teacher (or the official curriculum) is the one source of true knowledge depositing or writing it upon the blank slates of student minds. The banking model is therefore a system that treats students as passive receivers of predetermined knowledge. The creative act of the knowledge production process is therefore subjugated rendering education an oppressive endeavor. The banking model was therefore correctly understood to be a

central part of the colonization process, that is, the work of dehumanization in the interest of accumulating wealth and building empire. Coming to terms with how the impoverished communities within Brazil had been conditioned to accept their own subjugation in the wake of post-World War II US imperialism, the banking model of education proved an invaluable analytical tool.

As a counter-hegemonic response to this aspect of the Columbian pedagogy of conquest and plunder (see Malott, 2008), Freire theorized and practiced a critical pedagogy designed to provide a space for peasants to regain their own humanity through challenging their own domestication and oppression. Freire developed his critical pedagogy through an adult literacy program, which he became most known and respected for. Peter McLaren (2000) describes Freire's work here as "developing an anti-imperialist and anti-capitalist literacy praxis employed by progressive educators throughout the world" (p. 142). Summarizing Freire's literacy praxis as practiced by progressive educators, explains:

> By living communally with groups of peasants and workers, the literacy worker was able to help campesinos identify generative words according to the phonetic value, syllabic length, and social meaning and relevance to the workers. These words represented the everyday reality of the workers. Each word was associated with issues related to existential questions about life and the social factors that determined the economic conditions of everyday existence. Themes were then generated from the words (words such as 'wage' and 'government'), which were then codified and decodified by groups of workers and teachers who participated in groups known as 'cultural circles.' Reading and writing thus became grounded in the lived experiences of peasants and workers and resulted in a process of ideological struggle and revolutionary praxis. (p. 143)

This radical praxis was grounded in the notion that education is never neutral. The question, from a critical pedagogical perspective, is always, *whose interests is the education serving?* Freire's approach to education, as argued above, was consciously designed as a tool for the oppressed to free themselves from oppressive relationships, such as the relationship between boss and worker. Specifically, the work advocated for and practiced by Freire "... was able to effectively recast on a global basis the link between education and a radical politics of historical struggle ... fomenting interest in and dedication to the ways that education can serve as a vehicle for social and economic transformation" (McLaren, 2000, p. 141).

Freire's critical pedagogy was firmly grounded in and made possible by an intense believe in peoples' ability to govern themselves and understand the complexities of the contemporary global, neoliberal social order. This confidence in the people was a direct challenge to the colonialist paradigm of the banking model, which is based on the false assumption that the average person is too stupid and lazy to be able (or want) to control their own destinies. It is therefore not surprising that after US-supported military coup in 1964 and the resulting sharp conservative political climate in Brazilian society, Freire, who had been fully engaged in revolutionary literacy work, felt it necessary to go into self-inflicted exile. Summarizing this history Kincheloe (2008a) notes that,

> When the military overthrew the reform government of the country in April of 1964, progressive activities were shut down and Freire was jailed for his insurgent teaching. After

serving a seventy-day jail term, Freire was deported. He continued his pedagogical work in Chile and later, under the umbrella of the World Council of Churches, throughout the world. (p. 70)

It has been argued that Freire's commitment to an international global revolution was not only informed by his experience living in exile as a radical educator, but also his admiration for the theory and practice of Che Guevara (McLaren, 2000). Specifically, McLaren (2000) cites Freire's admiration for Che's ability to "engage in communion with the people" (p. 115) as a revolutionary act of love central to the founding of a post-capitalist, post-nation, global socialist universal humanism. Freire (1970) celebrates the Cuban Revolution in *Pedagogy of the Oppressed* for its ability to develop "an unskakable dialogical bond with the people, which increased during the process of revolutionary action" (p. 172). Again, Freire's commitments here gained him international respect propelling his scholarship into a leadership capacity rarely experienced by radical philosopher revolutionaries.

For example, introducing their foundational text, *The Critical Pedagogy Reader*, Antonia Darder, Marta Baltodano, and Rodolfo Torres (2008) note that once *Pedagogy of the Oppressed* was translated into English in 1970 it "became a watershed for radical educators in schools, communities, and labor organizations, struggling to bring about social change to public health, welfare, and educational institutions across the country" (p. 5). Reflecting on the significance of Freire and this event, our colleagues continue:

As a consequence, Paulo Freire is considered by many to be the most influential educational philosopher in the development of critical pedagogical thought and practice. From the 1970s until his death in 1997, Freire continued to publish and speak extensively to educators in the United States. Although Freire's writings focused on questions of pedagogy, his thought widely influenced post-colonial theory, ethnic studies, cultural studies, adult education, media studies, and theories of literacy, language, and social development. Most importantly, Freire labored consistently to ground the politics of education within the existing framework of the larger society. (Darder et al., 2008, p. 5)

Making a similar point in his widely read *Critical Pedagogy Primer* (2008a) the late Joe L. Kincheloe notes that, "with Freire, the notion of critical pedagogy as we understand it today emerges" (p. 69). Situating the significance of Freire within the international context of education, McLaren (2000) argues that he "was one of the first internationally recognized educational thinkers who fully appreciated the relationship among education, politics, imperialism, and liberation" (p. 141). It is the debate over the nature of these relationships, as alluded to above, that has fractured the critical pedagogical movement into Marxists, postmodernists (including critical race theorists, feminists, queer theorists, etc.), and independent radicals (including anarchists and others).

Academic Critical Pedagogy at the End of the Twentieth Century

The Chicano, African-American, feminist, environmental, and other identity/issue-based social movements of the 1960s and 1970s, occurring within much of the

world, the Western world in particular, led much of the educational left to a critical engagement with Marxist theories of social reproduction. For example, Samuel Bowles and Herbert Gintis' (1976) influential text, *Schooling in Capitalist America*, can be understood as part of this re-invigorated interest in Marxism. Bowles and Gintis' (1976) work attempts to provide an understanding of the determining role schools play in reproducing social classes and thus the capitalist system.

Bowles and Gintis offered invaluable insight into how schools are structured to reproduce the working class. That is, they provided compelling analyses identifying the ways in which the structure of the educational system/superstructure resembles that of the shop floor therefore socializing working class students into the working-class world of manual labor. For example, *Schooling in Capitalist America* demonstrates how working-class schools tend to be more pedagogically regimented with an over-emphasis on rules and discipline, and that middle/upper-class schools tend to resemble the pedagogical opposite, encouraging student creativity and developing decision-making skills.

In short, Bowles and Gintis argued that schooling contributes to cultural hegemony by socializing students from working-class families to become working-class workers and middle-class students to become middle-class workers. However, by treating students as passive objects in the process of social reproduction, Bowles and Gintis failed to acknowledge the partial autonomy of working-class culture. Conscious of the revolutionary agency among the oppressed peoples of the United States, for example, critical scholars began to charge Bowles and Gintis with being guilty of economic determinism and failing to acknowledge the vast complexity associated with social reproduction in advanced capitalist, ethnically and culturally diverse societies. Challenging traditional notions of them and us and claims of absolute certainty, these scholars came to name their approach *postmodernism*. Postmodern theory therefore came to dominate the educational left during the 1980s leading to the subjugation and rejection of not only scholars who identify as Marxist, but Marx's work itself.

Postmodern scholars have concluded that because of the inherent subjectivity of human thought, objectivity is an impossible objective. What is more, postmodern critics have accused the creators of the notion of objectivity of having more sinister intentions than naively striving for the unattainable, that is, they claim it has historically served to disguise the subjectivity of the white, male, Christian, moneyed interests of science. In other words, by claiming to hold the keys that unlock true understanding of the social totality in the form of what has been dubbed "grand narratives" or "meta-narratives," such as Marxism, social scientists create an exclusionary discourse that does not value the multiple voices of, and the many ways oppression is experienced by, not only white working-class men and women, but the many tribal communities native to North America, those of African descent and all peoples not included in current conceptualizations of whiteness.

The postmodern rejection of grand narratives has resulted in contributions to critical theory and educational practice even the world's leading Marxist educators have embraced. Summarizing postmodernisms' advancements from a Marxist

perspective Peter McLaren and Ramin Farahmandpur (2005) offer the following analysis:

> ... Postmodern theory has made a significant contribution in helping educators grasp the politics that underwrite popular cultural formations, mass-media apparatuses, the technological revolution's involvement in the global restructuring of capitalism, the ideological machinations of the new capitalism from Schumpeter to Keynes, and the reconceptualization of schooling practices in the interests of making them more related to (racial, gender, sexual, and national) identity formation within postcolonial geopolitical and cultural spaces. (p. 17)

In practice postmodernism has manifested itself in identity politics and is often associated with feminism. The emergence of identity politics has resulted in a fractured left more concerned with our gendered and racialized differences, for example, than with creating broad coalitions around similar class-based interests. Marxist commentators have therefore charged postmodern politics with being debilitating. The generally agreed upon solution by humanist Marxists is it to build a broad-based movement against the labor/capital relationship informed by an anti-racist/anti-homophobia/anti-sexist pedagogy that can unite those who depend on a wage to survive while respecting and finding strength and vision within the many voices of the worlds' oppressed peoples (Hill, McLaren, Cole, & Rikowski, 2002).

Supporting their theory with a material referent, postmodern annalists describe the contemporary social universe as characterized by the postmodern condition or postmodernity. Joe Kincheloe (2001) offers perhaps one of the most comprehensive descriptions of the phenomena known as the postmodern condition. In his description of the contemporary social universe Kincheloe (2001) includes: "the increased importance of the sign ...; an exaggeration of the power of those who hold power ...; the fragmentation of meaning ...; the growth of cynicism in a climate of deceit; the celebration of surface meanings ...; the substitution of fascination for analysis...; the reorganization of capital/economic power in a global context ...; [and] the change of change: everything is different or at least it feels that way" (p. 62). The picture Kincheloe paints of the world is one where people are simultaneously more connected, through technology and less connected due to the superficiality of public knowledge and discourse permeating our social universe. What emerges is an image of the world dominated by a socially unjust civic subjectivity fueled by the seeming neutrality of scientific reason that has given birth to technological innovations such as the internet and satellite television saturating our lives with information—information that hides behind a false sense of objectivity concealing the gendered, racialized, classed, and colonizing interests it ultimately serves.

While this analysis is useful for understanding capital's current use of discourse and the spectacle to maintain hegemonic control, Marxist educators argue that placing language and discourse at the center of investigations, we lose sight of the relationship between labor and capital that defines the profiteering purpose of the whole doctrinal system, whether modern or postmodern in form. The danger is therefore relegating our agency to only transforming language leaving the basic

structures of capitalist power, the labor–capital relationship, in tact. Contemporary Marxists have charged postmodernism with being the new idealism because it disconnects the mind (i.e., language) from the body (the physical, laboring, exploited body, and the romanticized oppressing body). Charging Hegel with perpetuating this form of decontextualized idealism, Marx and Engles (1932/1996) comment that the "phrases" Hegelians fight ". . . are only opposing other phrases, and that they are in no way combating the real existing world when they are merely combating the phrases of this world" (p. 41).

Psychology, Mind, and the Emergence of *Critical Constructivist* Critical Pedagogy

Kincheloe (2005) understood that education is not merely a technical or mechanical act between *depositors* and *depositees* as mainstream educational psychology suggests. But rather, in its most sophisticated manifestations, education is a full-body libidinal experience filled with emotion as the *spirit-ness* of the *free will* dances and experiments with the body's senses and biological endowments dialectically engaged with the larger social context and its own social conditioning. Summarizing this point in their text outlining the *postformal basics* P.L. Thomas and Joe Kincheloe (2006) note that their postformalism is intended to foster "an intoxicating cognition that repositions our relationship to the world and other people" (p. 14). The authors go on to argue that through the practice of education and the critical engagement with texts that "we can use the magic of words to move human beings to a new cognitive frontier" (p. 14).

It is this focus on contextualization that runs throughout Kincheloe's philosophy of education. It is the hyper-*de*contextualization of schools and curricula that the need for a contextualized approach becomes evident. It is the attempt to argue that knowledge is neutral and objective that prevents policy makers from stating (or being aware of) the real goal of this kind of education, that is, "to perpetuate the dominance of 'mainstream' culture—white supremacy, Christian ascendancy, patriarchal hegemony, class elitism, heteronormativity, and so on" (Kincheloe, hayes, Rose, & Anderson, 2006, p. xxx). When schools are organized in ways that reduce teaching and learning to technical and mechanical acts, as noted above, but validate knowledge produced from the perspective of the dominant culture as objective truth and therefore treated as a non-perspective, the vast array of religious, ethnic/cultural, linguistic, immigrant, social class epistemologies are belittled as wrong or inferior. Lost is the contextualized understanding that "learning cannot be separated from an individual's identity" and the social, historical, political context in which it exists (Kincheloe et al., 2006, p. xxix). Kincheloe's critical pedagogy/constructivism is therefore based on challenging the false hierarchy of intelligence dominant within mainstream schooling in favor of a contextualized approach to learning that celebrates epistemological diversity as counter-hegemonic and transformative.

From this critical constructivist perspective, it is important to begin with the ideas that you already posses. This place of departure understands that any new idea we are introduced to gets filtered by the ideas that we already have. If new ideas challenge preexisting one, we will either ignore the new information, get angry for being made to feel uncomfortable, or begin investigating the validity of the challenge and of our own positions. While the world is incredibly complex with many different kinds of people with many different kinds of ideas, it is incorrect, according to constructivism, to assume that the content of our ideas is objective or neutral. That is, our ideas are more than just *our opinions*, they always have multiple sources and influences and are therefore socially situated. Consequently, it is imperative that we begin by bringing to the surface our existing ideas in an effort to step back from ourselves and examine them with as much scientific objectivity as can be mustered. We want to learn new things about ourselves, which will allow us to make more informed curricular and pedagogical decisions as individual practitioners and as a community of teachers. If standardized testing scores are telling us that our students are performing at unacceptably low levels, then we want to be role models for our students and show them how we are taking responsibility to improve our own practice and knowledge base so our demands of them are not interpreted as hypocritical.

From its inception, critical pedagogy has been a response and challenge to the dominant, domesticating form of education informed by a paternalistic, Eurocentric, and mechanistic approach to teaching and learning. The mechanical approach to education would have us believe that *intelligence* is a physical entity like air or water, and, as such, can be measured and quantified with a high degree of validity and reliability. Intelligence itself, however, cannot be measured. We can only measure, with quite a low degree of certainty, what facts, ideas, or skills people seem to *know* or *know how to do* at a particular moment or moments in time. Intellect, that is, what we call *mind*, is a highly mysterious property. One's intelligence or use of their mind is influenced by *many* factors. While ancient Greek idealists, such as Plato, believed that the external world was a hindrance to the mind achieving pure thought and thus absolute truth, today, we know that the mind is nothing, or is not able to *become* anything, without a physical world to interact with.

For example, one's sense of security and *groundedness* in the world is directly connected to one's ability to have the confidence to cognate. When one is feeling insecure and exceedingly insignificant, it is difficult to concentrate and think clearly. Intelligence is therefore *not* a steady stream or a relatively fixed entity separate from the external world as the mechanical paradigm informing today's high-stakes standardized testing movement suggests. Intelligence, rather, is highly influenced by external factors and thus fluctuates with mood like the ebb and flow of the ocean or perhaps it is a little more unpredictable like gusts of wind. We have all had those *moments of inspiration* when we found ourselves in unusual *states of mind* that led to the development of an exceptionally brilliant idea and/or action making us feel, if only for a moment, *really* smart. When we learn to recreate those experiences more and more frequently, either unconsciously or consciously, we begin to develop

into more consistently smarter people. It is not *only* that we accumulate and create more knowledge, but we also become more adept at putting to use the biological endowments we already have. The challenge for teachers is therefore not only to be competent in vast interdisciplinary content areas, but also to create the psychological conditions in the classroom where students can learn to be smart and realize their critical potential.

How do we create these conditions? Students need to feel both valued and critically challenged. I continue to use the term *critical* because it seems evident that critical points of view and modes of analysis are highly conducive for generating emotional responses from learners. This is significant because it is within that emotional space that has proven to be most conducive to sparking students' passion to know, their epistemological curiosity, leading to the self-confidence needed for political agency and collective action against a capitalist ruling elite more powerful than all predecessors. First and foremost this means focusing on how power shapes the world we live in. Everything is embedded with power relationships, but too often hidden under the veil of hegemony. Uncovering that veil is a highly charged undertaking, and, when successful, creates paradigmatic transformation in individual and collective student thinking and action in and on the world.

Again, this *choice* of the critical tradition is not an arbitrary choice. It is not like choosing what color to paint the walls. Critical approaches are *chosen* because they have been systematically subjugated for centuries. This finding is intriguing—something so feared and despised by exploiters and plunderers for so long must surely hold some potentially transformative power. That is, we find that critical pedagogy, for example, embodies the power to heal and therefore the power to contribute to the *uprootment* of the source of the wounding. Upon further investigation we discover that the source of humanity's oppression, as suggested above, is an ongoing colonialist system of wealth extraction, exploitation, and the subjugation of points of view and ways of being that challenge the idea that the colonialist system is progressive, inevitable, and the most advanced stage of human social evolution, which today takes the form of global, neoliberal capitalism. The claim that capitalism represents the most advanced stage of human ingenuity is therefore Euro-centric. It is thus not surprising that Native Americans, Africans, Middle-Easterners, and the rest of the non-Western world have experienced the most traumatic, genocidal forms of western, colonialist subjugation.

Within the traditions of imperialist Europe, which were born out of the negatively transformative experience of being colonized by the Roman Empire, including their long legacy of colonialist, and later capitalist, societies, the use of education has had two primary functions: first, to train the specialized class charged with managing, enforcing, and, at times, constructing the laws and rules of the empire; the other function of the Empire's schooling has been to condition immigrant, Indigenous, and enslaved communities to willingly consent to the wealth extracting system for the benefit of an elite few. The bosses have traditionally presented this approach to education as a favor the naturally superior elite bestows upon the vast majority of average savages. It is *the* white man's burden. This domesticating education is

mechanistic because it assumes that teaching/learning is the neutral transference of objective facts from teachers to learners.

Critical pedagogy helps us to uncover that the holders of this Euro-centric cultural capital, teachers, and the specialized class, use it to control the bodies and behavior of those who rely on a wage to survive. Critical pedagogy uncompromisingly rejects an enslaving education advocating, instead, for an education of possibility for the future where students learn to embrace their own political agency by connecting their developing intellectual skills and intelligence to a larger, social, historical analysis of the world we live in. In practice, this does not look like a form of indoctrination, but rather, is a teacher-facilitated exploration and inquiry.

Critical Pedagogy in the Twenty-First Century: A New Generation of Scholars

As a new generation of scholars and scholar-activists establish themselves within critical pedagogy searching for creative ways to work within *the boss' institutions* while maintaining and developing our collective connections to the paradigm shifting nature of the revolutionary impulse, we are faced with an increasingly unjust and cruel world where

- Schools are intensifying their efforts to regulate consciousness further reducing the act of learning to a decontextualized techno-mechanical act
- The resurgence and intensification of a debunked educational psychology based on patriarchal, white supremacist, colonial assumptions
- Obama's Race to the Top education policy paving the way for increasingly corporate-controlled schooling in support of the bosses
- Out of control global corporate power and the subsequent deregulation of capitalism and, as a result, more suffering and poverty for people
- In other words, growing unemployment, poverty, and anger leaving many whites vulnerable to racist ideas
- Thus, the resurgence of ultra-conservative, white-supremacist corporate-funded politics exemplified within the Tea Party
- Racist immigration laws in Arizona, California, and elsewhere, perpetuated through the discourse of homeland security, thereby threatening the freedom of all
- Capital's insatiable appetite for wealth, enabled by the ultra-destructive technological might of modern industrialism, has rendered dangerously far too many of the Earth's natural ecosystems, and their vast biological diversity, extinct
- Lax environmental regulations leading to such disasters as British Petroleum's explosion and destruction of one of their largest oil rigs leading to 11 immediate deaths and millions of gallons of gushing oil in the Gulf of Mexico, the largest oil spill in history, threatening the vitality of the ocean, that is, the *life source*
- Perpetual war as the bosses compete to control the last major oil reserves

- The beginning of a World Water War—a war infinitely more deadly and serious than the West's infamous oil wars, especially for the worlds' Indigenous peoples, but eventually all will suffer
- An economic crisis comparable to the Great Depression of 1929, which has paved the way for a new discourse of capital and the quickly fading promise of social reforms by the US's first black president
- Consequences of centuries of subjugating non-dominant forms of knowledge, such as Native North American, African, Islamic, Irish, Anarchist, socialist feminist, and Marxist
- Euro-centric imperialist super-power whose white supremacist dominant perspective is so pervasive that black life is consistently devalued and sacrificed in genocidal proportions. Looking to the criminal justice system in the United States, Abu-Jamal (1996) cites a disturbing example of this disregard for the inherent worth of African-Americans: "defendants charged with killing white victims in Georgia are 4.3 times as likely to be sentenced to death as defedants charged with killing blacks" (p. 77). This study has been repeated throughout the United States producing, unfortunately, consistent results across contexts

Situated within this troubling context, a new generation of critical pedagogues are creating new and exciting critical pedagogies for the twenty-first century. Because our work, as emerging scholars, is well-published and gaining a reputation in its own right, we recently released a substantial volume, *Critical Pedagogy in the Twenty First Century: A New Generation of Scholars* (Malott & Porfilio, 2010). However, while Antonia Darder et al.'s (2008) comprehensive *The Critical Pedagogy Reader* and Peter McLaren and Joe L. Kincheloe's (2007) important *Critical Pedagogy: Where Are We Now?* both provide a nice mix of original and new scholars, this is the first *sample*, if you will, of new critical pedagogues brought together for the purpose of providing an example of how the new generation is recreating critical pedagogy for our diverse contexts from our wide-ranging experiences. Providing a glimpse into issues and approaches advanced by this new generation of critical pedagogues the following summary is instructive:

- Section one: *Social Theory and Critical Pedagogy* is the first section of this volume. It is presented first because it represents the big picture in which all pedagogies are situated. We therefore begin this volume considering some of the social theoretical contexts of critical pedagogy. Really, any chapter in this volume could have been placed here. The chapters that were chosen for this section were chosen because they both made significant theoretical contributions to critical pedagogy, and because they represented a nice diversity of perspectives—therefore contributing to our epistemologically diverse, democratic choice.
  - Pierre Orelus (2010) begins this first section with his chapter written from the perspective of a "postcolonial subject of color," which offers a critically rigorous theoretical *in-practice* example of the vision of critical pedagogy laid out in this introductory chapter. Orelus takes a global approach in his historical

analysis of how the *West* has and continues to subjugate and oppress the *Rest*. His critical pedagogy is therefore one of international solidarity against the globalized, neoliberal, empire of the *West*.

- In Chapter 2, Martin and Te Riele (2010) problematize critical pedagogy has ignored, fractured, and too often co-opted. As a response, the authors advocate for a place-based approach to critical pedagogy focused on *hope* and therefore designed to unite the educational left around today's major world issues, such as perpetual war, Euro-centrism, environmental destruction, and a super-exploitative, global, capitalist system. In the process Martin and Te Riele advance our understanding of what revolutionary academic critical pedagogy can look like.
- Kip Kline (2010), in Chapter 3, explores theoretical traditions beyond the Frankfurt School as offering additional theoretical ammunition critical pedagogy needs to confront the global-capitalized, cynical, neoliberal present of the twenty-first century. That is, Kline considers the *appropriateness* of Søren Kierkegaards's existential notion of "repetition" and Michel Foucault's "*anthropologia negativa*" in regards to the practice and theory of critical pedagogy.
- Analyzing subsequent editions of one high school literature textbook over time, Heather Hickman (2010) explores the complexity of how textbooks perpetuate heteronormativity and how critical pedagogues and queer theorists can disrupt that marginalization. Hickman skillfully discusses the role of power in the creation of such books as well as ways to move beyond marginalization through critical questioning and activism. Consequently, Hickman contributes to the scholars arguing that the theoretical foundation of critical pedagogy must too include Queer theory in addition to the many *feminisms* that exist, such as Chicana feminism and black feminism.
- In this chapter, Julie Gorlewski (2010) discusses the historical development of critical theory as a critique of functionalist approaches to understanding the role of schooling in society. In her essay Gorlewski argues that there is no need to move beyond critical theory in a manner that represents a radical theoretical departure as postmodernists suggest. That is, Gorlewski concludes that critical theory provides opportunities to advance education with the ultimate goal of achieving both understanding *and* social justice.
- Richard Kahn (2010), in his essay, "For a Multiple-Armed Love: Ecopedagogy for a Posthuman," outlines an ecopedagogy that looks to emergent subcultural valences and avant-garde representations to critically listen for novel generative themes that might be the germinative subjects of multitudinous dialogues as part of contributing to a new *science of life*. Toward these ends, Kahn's ecopedagogy here also reads global popular culture against the grain after the manner of a critical public pedagogy in order to isolate and inveigh against dominator values, norms, ideas, and their various mainstream commercial representations. Ultimately, Kahn's ecopedagogy seeks to mount a form of posthuman cultural studies in accordance with the normative demands made by a revolutionary zoöphilia.

- The second section deals specifically with educational psychology and critical pedagogy. This is an important section because critical pedagogy has focused so much on culture and capitalism that learning processes and challenges to traditional educational psychology has been less prevalent. This is significant because of the continued dominance of behaviorist and hierarchical approaches to human cognition in schools and colleges of education.
  - The authors/engagers of Chapter 5 provide a unique framework and process of engaging their subject matter. Tricia Kress, Christopher J. Avilés, Cindy Taylor, and Melissa Winchell (2010) discussed this chapter through a dialogue. As an assistant professor of leadership in urban schools, I work closely with doctoral students as they learn to conduct research about urban education. Because of the tendency of many doctoral students to gravitate toward Maslow to explain what happens in schools, the reductionistic tendencies embedded in his theory too often go unchallenged. In their chapter this group of scholars dialectically answer a number of questions such as: Who decides what "needs" means? Who decides in what order humans can experience needs? What does it mean to be self-actualized; says who? Are needs only intrinsic/individualistic? Do women and minorities experience needs differently than a white male? As a result the authors make a valuable contribution by (re)theorizing Maslow's theory to include other voices; thereby, opening it up to multiple interpretations without discarding it.
- In the next section we explore examples of educational reform situated in the context of critical pedagogy. Because critical theory is concerned not only with understanding the world, but also with transforming it, it makes sense to include a section that deals specifically with *educational reform and critical pedagogy*. Again, the chapters chosen for this section were chosen based on our commitment and obligation to diversity and rigor.
  - In Chapter 6, Touorouzou Herve Some (2010) offers an analysis of why many African countries committed to achieving education for all, continue, decade after decade, to fail to meet their goals. Some asks "if history is littered with the bones of dead educational reform projects initiated by global forces, what are the processes that cause failure in particular national contexts?" Answering this and other questions Some uncovers the forces of neoliberal capitalism through the voices of Burkina Faso teachers and their unions. Some makes valuable contributions to our understanding of educational politics in Burkina Faso and the ongoing *colonization of the African mind*.
  - Paul Carr (2010), in Chapter 7, develops a conceptual and theoretical framework that significantly advances democratic critical pedagogy. Carr explores the way critical pedagogy can offer students a way to think about political engagement beyond the voting booth leading to what he calls a more *robust democracy*. Situated in the context of the United States' first black President, Barack Obama, who is closely connected and accountable to corporate and moneyed interests, Carr's work is desperately needed as the limits of voting are clearer now than ever.

- After reform, we turn our attention to knowledge production/research methodology and critical pedagogy, where we explore the politics of knowledge production in schools and universities. These, by and large, are curriculum studies situated in concrete contexts.
  - Beginning this important section, Wayne Au (2010) engages us in *standpoint theory* and the ways it can strengthen our work as knowledge producers/curricularists. In his chapter Au explores the complexities of the notion that *there is no neutral or abstract curriculum, and thus no neutral or abstract school knowledge*. After outlining standpoint theory as conceived by leading critical, feminist scholar Au draws upon this rich theoretical groundwork as a basis for the development of curricular standpoint. As a result, Au makes important contributions to those of us who develop curriculum and construct knowledge through scholarly endeavors.
  - Christina Ann Siry and Carolyne Ali-Khan (in no particular order) (2010) examine the critical possibilities of collaborative writing, as multiple layers of voices intertwine to produce and understand collaborative authorship. In their important chapter Khan and Siry challenge the politics and epistemological assumptions of the do-your-own-work mentality pervasive throughout education. Through a theoretical, methodological, and ethnographically thick exploration of collaboratively produced text, they offer a different paradigm for understanding and producing knowledge. As a result, Siry and Khan make significant contributions to the critical pedagogical choice of democratic praxis.
  - Darren Lund and Jim Paul's (2010) "Off-loading Self/Other/World Responsibilities: Confronting Questionable Ethics in Youth Engagement in Social Justice Activism" represents an example of a *duoethnographic inquiry* focusing on contradictions they have become aware of their work in the field of youth social justice activism. Through their dialogue Lund and Paul ask questions about the kind of expectations and intentions that educators, parents, and social justice theorists and practitioners who occupy the adult community of critical pedagogy are asking of young people when led into social justice and activism work.
  - Examining the role of the mass media on graduate student perceptions of education, Catherine Lalonde (2010) contributes to our understanding of how movies shape our social construction of educational reality. Lalonde explores the ways in which two groups of graduate students construct their identities as students and/or teachers. Broadly, this research highlights important findings related to the ways in which graduate students in the field of education form their identities as students and teachers, negotiating processes both inside and outside of the classroom.
- Teacher education and critical pedagogy is the next section. This is a particularly important section as all teachers go through teacher education programs. In this section the authors explore the complexities of teaching students uncritically socialized in the dominant, white supremacist, capitalist society.

○ Vivian García López (2010) critically examines the Euro-centric frame-works utilized in US educational institutions. López specifically looks to *fear* because it frequently surfaces in discussions with pre-service teachers and others, which she identifies as one of the most significant barriers she faces. Constructing a critical pedagogy designed to eradicate what López calls *the big four-letter "F" word in education*, fear, she advances the transformative potential of our practice significantly.

○ In their chapter Abraham P. DeLeon and Emily Daniels (2010) explore Foucault's notion of *the gaze* and his ideas on surveillance and its links to power relationships present in social and institutional relationships. After reviewing this important subject matter, DeLeon and Daniels demonstrate the importance of utilizing our experiences to build and expand knowledge and then provide further reflections on the gaze of teacher education programs and how this operates through disciplinary and surveillance realities within public schools. This chapter provides significant tools for pre-service teachers learning about the complexities and social control that dominate the world in which they are entering.

○ In "Toward Mainstreaming Critical Peace Education in U.S. Teacher Education" Edward J. Brantmeier (2010) outlines the ways in which critical peace education engages scholarship steeped in critical social theory with peace education aimed at generating conscious pre-service and in-service teachers who engage in socially transformative efforts to curb indirectly violent, oppressive attitudes, behaviors, knowledge paradigms, and social structures in US public schools. Rather than status quo reproduction, critical peace education aims to empower educators as transformative change agents who critically analyze race, class, and gender oppression alongside their students and who provide culturally responsive pedagogy, culturally inclusive curriculum, and fair assessment for diverse learners. Brantmeier poses challenges and possibilities for infusing critical peace education in schools of education.

○ Carrie Freie and Kirstin R. Bratt (2010) in "Nice Girls Become Teachers: Experiences of Female First-Generation College Students Majoring in Elementary Education" present findings from a qualitative research project investigating the experiences of a group of first-generation, working-class female college students in a teacher education program. The discussion focuses on the ways the students negotiate the multiple communities they are a part of from the standpoint of their locally situated, economic, social, and gendered selves. Interviews with a group of these students reveal issues the students face in their everyday lives, such as the debate of whether, when, and where to speak one's mind; ways to deal with the expectations of traditional gender roles; and how to work and live within varying social-class settings with different expectations.

● This section explores classroom teaching and critical pedagogy, which is particularly important because critical pedagogy is too often disregarded as unrealistic

and not applicable to the classroom context. In this section we argue that critical pedagogy is not only doable in public schools, but it leads to a more engaging, rigorous experience compared to more traditional approaches.

○ Andrew Gilbert (2010) provides important contributions for the case for critical pedagogy across the disciplines looking specifically to high school science classrooms. Gilbert compares the practices of a critical science teacher and a traditional one. The main goals of the study were to investigate: the differing approaches and beliefs of these teachers within these differing science contexts, how students responded to these contrasting pedagogies, and how this difference impacted student perceptions of their role within the science classroom community as well as their lives beyond the classroom. The comparison of these contexts provides meaningful insights for how to utilize critical approaches to science teaching as well as a means to create more productive classroom environments that view classrooms as places of intellectual engagement as opposed to a battlefield mentality that often alienates both students and teachers.

○ In *Enacting a Transformative Education*, Kurt Love (2010) explores the possibilities of putting into practice critical pedagogical approaches to teaching and learning within the public school context. Love explores the great tragedy of behaviorist NCLB approaches to education that continues to fail so many. Simultaneously, Love celebrates the many examples of teachers doing amazing critical pedagogical work despite the current anti-intellectual context of phonics-based teacher proofing. It is within these examples of transformative teacher resistance that Love finds hope and inspiration for a less oppressive future.

○ In *To Upend the Boat of Teacher Mediocrity: The Challenges and Possibilities of Critical Race Pedagogy in Diverse Urban Classrooms*, Daniel D. Liou and René González (2010) outline the challenges stemming from school cultures making it difficult to enact socially just anti-racist educational practices.

• In this final section, we explore the transformative potential of technology engaged and put to use from a critical pedagogical perspective. Given the sheer dominance of computers and other industrial machines and inventions, this section is particularly important as we engage the concrete world in the twenty-first century.

○ Tricia Kress and Donna DeGennaro (2010) examine various ways in which social media disrupts political, social, and cultural structures as a transformational counter-hegemonic practice. The authors point to ways that technology can serve as a medium to cultivate opportunities for creating worlds that traverse ones which are traditionally hegemonic and imposed. Kress and DeGennaro argue that this transformative potential is too often lacking within the traditional classroom. By utilizing critical pedagogy and cultural sociology, the authors seek to transcend dominant conversations around media and technology use within the walls of the classroom. As a result, the authors make valuable contributions to the transformative potential of learning technologies.

○ "Learners and oppressed Peoples of the World, Wikify!: Wikiversity as a Global Critical Pedagogy" by Juha Suoranta (2010) is grounded in the conviction that hegemony, in part, refers to an exclusion of people to participate in collaboration and in a mutual sharing of ideas. Suoranta therefore argues that a twenty-first century critical pedagogue cannot be a solitary person who merely publishes, but must be one who acts in solidarity with the critical scholars and practitioners online and in other social contexts. Consequently, Suoranta acknowledges the immediate need to invent and use the tools of learning that allow collaborative knowledge work, and an urge to generate collective intelligences and global knowledge networking. Herein lies the significance and purpose of Suoranta's *Wikiversity*—that is, as a powerful tool for global critical pedagogy defined as an open learning community located in the virtual world. As an open and in principle inclusive educational platform, the Wikiversity, argues Suoranta, can actualize some of the not yet fully utilized potentials of critical education by encouraging everyone's participation.

○ Finally, Joseph Carroll Miranda (2010) examines the *Hacker culture* and its ethics, which offers a refreshing approach and outlook as to how technology can be used in positive ways with potential global benefits. Guided under the theoretical backdrop of Freire's pedagogy of freedom the author intends to build a bridge between theoretical approaches regarding technology and critical pedagogy working and developing the concept of emancipatory technology. This fusion generates a preliminary horizon of both theory/praxis that embraces the notion of emancipatory technology and its potential for creating a society that intends to eradicate all forms of oppression present within the worlds of both education and technology.

This book is testament to the hope that the new generation of scholars has, and will continue, to contribute to critical pedagogy beginning to be viewed by the wider education community as an inclusive tool and not just a *white, male thing*. Following both revolutionary and academic critical pedagogues (in no particular order), Toussaint L'Ouverture, John Brown, Poncho Villa, Emiliano Zapata, Malcolm X, Frantz Fanon, Huey P. Newton, Cheikh Anta Diop, W.E.B. DuBois, John Dewey, Mikhail Bakunin, Max Stirner, Pierre-Joseph Proudhon, Peter Kropotkin, Errico Malatesta, Karl Marx, Antonia Gramsci, Edward Said, David Graeber, Dennis Fox, Judith Suissa, Paulo Freire, Vine Deloria, Joe L. Kincheloe, Herman Garcia, Gloria Anzaldúa, Sandy Grande, Gregory Cajete, Peter McLaren, Mumia Abu-Jamal, Dave Hill, Manning Marable, bell hooks, Oren Lyons, Noam Chomsky, and countless others, today's critical pedagogy is bringing a fresh, new approach based largely on our own generational-specific experiences and worldviews. For example, most of us came of age during the conservative backlash of the Reagan, Bush, Thatcher, Duvalier, Pinochet, etc., years in the 1980s and 1990s witnessing, as both spectators and participants, the emergence of the global counter-cultural push back from below, and, based on our specific identities and places, approach our critical pedagogies according to how that place and time period shaped our understandings of self, other, world, and possibility.

As it has been widely commented on, perhaps most famously by Franz Fanon, that every generation has a social justice-oriented call to action based on the socio-historical context of their particular era, which can either be addressed or betrayed, my generation too has occupied a world endowed with specific characteristics. These characteristics, outlined above, indicative of a neoliberal, white-supremacist, industrial, are being addressed, in different ways, by the contributors of *Critical Pedagogy in the Twenty First Century: A New Generation of Scholars* (Malott & Porfilio, 2010). However, because of the complex nature of today's global context, and because of the resistance against grand narratives within the early origins of critical pedagogy, the critical pedagogical movement today is also somewhat fractured and thus not united. In our work to resist neoliberalism for the Earth and humanity, we might do our work justice by establishing a more comprehensive vision and strategy for movement building and counter-hegemonic work. This vision cannot come from a single of handful of voices, but rather, must come from an ever-expanding broad base or coalition. Toward these ends it might be worth establishing a *Critical Pedagogy in the Twenty First Century* conference with such consensus building serving as a central goal. David Graeber's (2002) work on what he calls *the new anarchists* and their democratic organizational structures (see Chapter 7) might become a valuable source here. While these issues are revisited in Chapter 7, for now, we turn to a summary of the major concepts associated with academic critical pedagogy, which can be broken down into two overlapping categories—analysis or outlining the hegemony, and practice, or counter-hegemonically intervening in the hegemony, against the hegemony for social justice or humanistic revolution.

Central Concepts: The Heart of *Academic* Critical Pedagogy

Beginning to answer the question, *why did academic critical pedagogy emerge,* we can further delve into its distinction from revolutionary critical pedagogy. That is, we can look at revolutionary critical pedagogy as emerging in more of a pre-conquest, pre-indoctrination context. For example, in *A Call to Action: An Introduction to Education, Philosophy, and Native North America* (2008) I draw a distinction between the critical praxis of Crazy Horse and the Lakota's armed resistance against being subjugated by the United States military, as an act of war between two nations, and today's post-conquest context of idelogical indoctrination and subjugation of Indigenous knowledge, language, and social arrangements. It is because of this ideological conditioning, affecting all members of society, that academic critical pedagogy emerged with a strong emphasis on *critical self-reflection*. Because of its significance it is worth pausing for a moment to focus our attention on the notion of *critical self-reflection*. In the following subsections, I explore this and other key concepts central to critical pedagogy.

The following list of terms provides an introductory framework for understanding what we might call *a general vision of critical pedagogy*. However, there are

many critical pedagogies and therefore a great diversity among critical pedagogues. Everyone involved in the critical pedagogical movement therefore might not universally accept my particular approach. This does not bother me or make me want to *recruit* colleagues to my particular approach. Rather, it reminds me that the world is complex and an effective critical pedagogical movement for social and environmental justice must too be complex and epistemologically diverse. At the same time, a common thread throughout critical pedagogy is the notion that education should not just serve dominant forms of power, but it should transform the world for some kind of *justice*—however, defined. The following list of terms is therefore divided into two sections. The first section includes those terms that help us name the world and uncover the often hidden mechanisms of coercive power and oppression. The second section focuses on those terms that speak to transformation and resistance, which is agency. Put another way, the first section examines the process of *hegemony*, while the second section focuses on *counter-hegemony*.

- Critical self-reflection: We can begin by describing what we mean by self-reflection. The aspect of our *self* that we are particularly interested in *reflecting* upon is our interpretive framework, which is the forever-shifting product of our ongoing conditioning and experiences in the world mediated by dynamics of power and privilege. That is, we are motivated here by the desire to become conscious of our conditioning as a transformative act. To understand how we are shaped by capitalism and institutional and culturally saturated white supremacy, for example, we must be aware of how we view ourselves in relation to the world around us. Becoming aware of *self* offers the possibility of developing practices with *others* founded upon the choice *not* to serve the interests of capital and Euro-centric hierarchy. Self-reflection, in other words, through the guidance of a critical education, can lead to a revolutionary shift in understanding and the political agency required for democracy and a world without human suffering, exploitation, and environmental degradation and disrespect.

  Acquiring the skills to be able to step back and reflect upon your own ideas about the world conscious that they are the product of external conditioning is a central aspect of the process of critical pedagogy. For most of us raised in this doctrinal system, we tend not to be aware that our ideas are not just *how it is*, or objective reality, but rather, the product of a system designed to manufacture consent for a system of oppression and exploitation. This is hegemony, another central concept of critical pedagogy.

- Hegemony: When a discourse has been adopted by a dominant society, it can be said to have been hegemonized because it is treated as *normal* and *natural*, that is, *just the way it is*. Hegemony is the combined use of force and consent to maintain an unequal system where the vast majorities labor for the benefit of an elite few. Cultural institutions, such as schools and the media, are the primary vehicles where citizens are indoctrinated with the beliefs that support the dominant structures of power, such as *the United States is the most democratic nation in the world*, *capitalism is inevitable,* and *the bosses are the bosses because they are smarter or more clever than the average slob*. These messages, which form

a worldview or ontology, inform curricula and policies and are therefore trans-
mitted by teachers and media workers, often unknowingly, because they tend
to be indoctrinated with the same beliefs, values, and ideas of the dominant,
Euro-centric, capitalist society.

- Hegemonic: "The process by which dominant groups seek to impose their
  belief structures on individuals for the purpose of solidifying their power over
  them. Thus, hegemony seeks to win the consent of the governed to their own
  subjugation without the use of coercion or force" (Kincheloe, 2005, p. 15).
- Essentialism: "The belief that a set of unchanging properties (essences) delineates
  the construction of a particular category" (Kincheloe, 2005, p. 116). For example,
  Indians are not good at school and therefore best suited for low-level manual
  labor. The social barriers due to a racist society and the process of colonization
  give way to stereotypes, which are "then used to justify the barriers" (Sleeter,
  2002, p. 43).
- Banking model: Assumes education is a technical, mechanical act where the role
  of teacher is to deposit predetermined facts into empty student minds. Assumes
  students possess no valuable knowledge. Assumes that knowledge is objective
  and that there is always just one right answer. In the context of North America
  the content of this banking model has been Euro-centric. Consequently, the Euro-
  centric perspective of the dominant society has been presented as objective or a
  non-perspective.
- Determinism: From this perspective, efforts to resist assimilation, rejuvenate
  Indigenous language and culture, and maintain other non-Western forms of
  knowledge production and social organization (i.e., holding land communally)
  are viewed as irrational, against progress, and against historical inevitability.

To make wise pedagogical and curricular decisions, teachers need to have intimate
knowledge about how students learn and think. We know students have minds of
their own and their preexisting schema filters every new idea we present to them.
These insights come from constructivism (outlined below), which challenges the
old banking model. However, the ideas about how students learn informing NCLB
are behaviorist (banking). What follows is therefore some of the central concepts
associated with issues of agency and resistance.

- Agency: "A person's ability to shape and control his or her own life by freeing
  the self from the oppression of power" (Kincheloe, 2008a, p. 42).
- Counter-hegemony: Antonio Gramsci theorized that wherever there is hegemony,
  there would be counter-hegemony, that is, a movement designed to fight the
  oppressive nature of hegemony. It is argued that humans naturally tend toward
  happiness and fulfillment, so wherever you find subjugation and social injustice,
  you will also find counter-hegemony.
- Discourse analysis: "The study of discourses where a discourse is defined as a
  constellation of hidden historical rules that govern what can be and cannot be
  said and who can speak and who must listen. Discursive practices are present
  in technical processes, institutions and modes of behavior and in their forms

of transmission and representation. Discourses shape how we operate in the world as human agents, construct our consciousness, and what we consider true" (Kincheloe, 2005, p. 142).

- Constructivism: An approach to cognition that acknowledges that students come to school with cultural and experiential knowledge and worldviews that they use to construct meaning and make sense of new ideas they encounter. Constructivists argue that knowledge does not exist *out there* independent of what we construct in our minds. Constructivism understands that people are rarely aware of the worldviews they possess. This is especially true for people who come from the dominant group because their worldview is the same as the dominant society. Adherents to this perspective are called constructivists. Critical constructivists argue that education is inherently political because it is part of the socialization process and societies, by definition, are political. That is, they are the manifestation of specific human engineered social arrangements.

- Critical pedagogy: An approach to education that understands that there is no such thing as an objective education because society is moving in a particular direction and claims of neutrality can therefore be interpreted as going along with what already exists. All education is designed to contribute to citizenship formation. The question is, what kind of citizens are being constructed. Critical pedagogy is interested in providing students with the critical thinking skills they need to understand where power lies and how it operates. Critical pedagogy is also self-relfective. That is, it challenges students and teachers to be aware of their own position in the larger structure of power and the role they are supposed to play in reproducing it. Critical pedagogy is revolutionary. It is liberatory. It is counter-hegemonic (see below).

- Subjugated knowledge: Worldviews that have been disqualified as inadequate or primitive because it is falsely assumed that they are insufficiently elaborated according to the Western Euro-centric approach to education and social organization. This concept is particularly important when considering student strengths within Indigenous communities. It is perhaps the subjugated knowledge of Native students that is their greatest epistemological strength. In other words, it is Native students' view from below and their own critical reading of the world that critical educators struggle so hard to help dominant society students understand and learn from. In other words, non-Indigenous and non-critical minds have difficulty appreciating and understanding the subjugated knowledge of indigeneity. This is especially true since so many Native communities have assimilated so thoroughly into the capitalist political economy. How could it be otherwise? This has been a matter of survival, and if at all relevant *survivance*.

- Understanding student perspectives: While 90% of teachers in North America are white, students are becoming increasingly diverse. More and more students are therefore coming to school with the subjugated knowledge of their home communities. If teachers want to play a positive role in the communities they serve, they need to learn to understand and appreciate subjugated knowledges. One possible

place of departure is self-reflecting on one's views, values, and assumptions while simultaneously listening to students and their community's leaders.

- The idea is to develop an awareness that hegemony has effected everyone rendering student ideas complex and, at times, contradictory. Teachers therefore must be able to distinguish between hegemonic ideas and beliefs and counter-hegemonic perspectives and practices. *The goal of critical pedagogy here is to help teachers increase the complexity of their thinking for global social justice*. We therefore stress the importance of taking responsibility. However, our conception of responsibility is *not* equated here with being a hardworking slave for capital and dominant forms of power. The citizen required by No Child Left Behind (NCLB), on the other hand, is one who has no mind of his or her own. They dutifully memorize as much as they can of what they are asked to memorize. They are, in turn, praised for their consent.
- Critical responsibility is therefore concerned with obeying the ideals of democracy and social justice. This requires challenging NCLB and the basic structures of power—that is, political militancy. Reflecting on Freire's deep commitment to these ideals of democracy McLaren (2000) comments that, "he was also acutely aware that under the name of the 'free market,' democracy had retracted its commitment to social justice, and along with that retraction had imperiled its fundamental commitment to education" (p. 141).

Challenges Against Critical Pedagogy

While critical pedagogy has been an invaluable tool advanced by the educational left since the 1970s and before, it has not gone without some internal criticism. Reflecting upon these critiques in the introduction to their critical pedagogy reader Darder et al. (2008) conclude that, "many of the critiques raised have effectively served to prompt a deepening consciousness as to our interpretations of critical pedagogical theories and practices within school and society" (p. 14). *Critical Pedagogy in the Twenty-first Century: A New Generation of Scholars* provides further evidence that the following critiques leveled against critical pedagogy have in fact strengthened this movement for a world with less abuse and less suffering. The *critical* (versus the conservative/neoliberal) critiques waged against critical pedagogy, according to Darder et al. (2008), can be organized into six categories:

- Feminist critiques, it can be argued, are due to the consequences of "the leading recognized scholars considered to have most influenced the development of critical theory and critical pedagogy have all been men, with the exception of Maxine Greene" (Darder et al., 2008, p. 14). Many of these critiques are epistemological. That is, feminists have argued that critical pedagogy and the Frankfurt School privilege a decontextualized "reason" and obsession with *the mind* subjugating the body and the knowledge produced through "an explicit engagement with the historical and political location of the knowing subject"

including "personal biographies" and "narratives" (Darder et al., 2008, p. 14), for example.

- A challenge coming from many working-class colleagues charges critical pedagogy with using elitist, inaccessible language. The argument is that language can create another form of oppression and exclusion. Consequently, rather than serving as a tool of liberation, critical pedagogical work "reinscribes power and privilege" (Darder et al., 2008, p. 15). Others argue that *dumbing down* or simplifying language paternalistically lowers standards and expectations therefore disrespecting the intellectual endowments of those who were not reared with dominant society cultural capital.

- Those recognized as leaders of critical pedagogy have not only been men, but they have been *white* men. While there is a long tradition of women and men of color doing cutting-edge critical pedagogical work, as underscored throughout this chapter (and this book more generally), they have tended not to receive the same recognition and status as the white male critical pedagogues. Summarizing the consequences of this unfortunate trend, Darder et al. (2008) note that there is a tendency and perception among communities of color that critical pedagogy embodies a "failure to explicitly treat questions of race, culture, or indigeneity as central concerns" and from those specific communities themselves. Similarly, Joe Kincheloe (2007) identified "one of the greatest failures of critical pedagogy at this juncture of its history" being "the inability to engage people of African, Asian, and indigenous backgrounds" (p. 11).

- Darder et al. (2008) also identified postmodern challenges to the *one right answer* approach to epistemology embraced by The Enlightenment's grand-narrative structure informing critical theory and critical pedagogy. Because this discussion was discussed above, I will not repeat it here.

- Similarly, critical pedagogues have challenged the tradition of retreating from social class, which is ironic given the fact that in this neoliberal global capitalist age, the gap between the rich and poor is wider than it has ever been in history. That is, the rich are richer and fewer, and the poor are poorer and more numerous, globally, than ever before experienced. At a time when social class should be more central to critical pedagogy than in less-exploitative times, it is troubling that social class is being ignored and belittled by identity politics. This situation speaks to the extent to which critical pedagogy has been co-opted by dominant forms of power.

- The final challenge comes from environmentalists and the Green movement. The argument is that critical pedagogy has failed to transcend a human-centric focus leaving an analysis and action against environmental devastation and degradation largely unexamined by the major thinkers of critical pedagogy. As with social class, this failure is situated in a context of urgency and ecological catastrophe. That is, industrial society, in socialist, communist, or capitalist manifestations, since the beginning of the industrial revolution, has irresponsibly engaged the world not as an interconnected and interdependent system but as a series of natural resources whose only value can be measured in dollars.

Another center of critique comes from those committed to maintaining the basic structures of power as they currently exist. This is the perspective of the bosses. It should be no surprise that those who benefit most from the capitalist relations of production and the globalized, Euro-centric, neoliberal order would not be pleased with the purpose and vision of critical pedagogy. The bosses would have us believe that we are too stupid to be fully participating, democratic citizens because they are scared of the overwhelming evidence that demonstrates that human populations throughout the world have had an historic tendency to efficiently and successfully equalize wealth and power when we are strategically positioned to do so.

Part III
Critical Theory and Revolutionary Psychology

Chapter 8
Anarchy and Feminism in Psychology: Widening the Postformal Circle of Criticality

> *In their search for ways to produce democratic and evocative knowledges, critical constructivists become detectives of new ways of seeing and constructing the world.*
>
> (Kincheloe, 2005, p. 4)

Considering how Kincheloe's postformal psychology as critical revolutionary practice might be extended and contributed to through the engagement with *new*, or too often ignored, *ways of seeing and constructing the world*, what I understand to be the more democratic impulses of the vast, diverse tradition known as anarchism will be explored here. I will situate this focus on anarchy within the history of the feminist movement, which played a central role in Kincheloe's (2008a) critical pedagogy. For example, in Kincheloe's (2008) *Critical Pedagogy Primer* he argues that black feminist and cultural studies scholar, bell hooks, is one of a hand full of "important figures in the emergence of critical pedagogy" (p. 59). hooks' (1984) contribution to critical pedagogy through feminism, according to Kincheloe (2008), was to challenge the white middle-class point of view of the women's movement that assumed their experiences represented the experiences of all women. That is, hooks (1984) argued that Betty Friedan in *The Feminist Mystique*, which served as the basis for 1970s feminism, was based on:

> The plight of a select group of college-educated, middle and upper class, married white women—housewives bored with leisure, with the home, with children, with buying products, who wanted more out of life. (p. 1)

That *more* that Friedman alluded to has famously become known within feminist literature as *careers*. hooks' (1984) critical contribution here is that she extended feminist discourse to include considerations of race and class. Challenging Friedman, hooks (1984) notes that what was not being addressed was the question of who would be taking care of the kids of white middle-class women once they began their more fulfilling careers. Summarizing this crucial point, hooks (1984) notes that white, middle-class feminism "did not speak of the needs of women without men, without children, without homes. She ignored the existence of all non-white women and poor white women" (pp. 1–2). Summarizing this contribution Kincheloe (2008) notes that, "hooks and other women of color moved many feminists toward

an effort to challenge an entire system of domination" (p. 83). Critical pedagogy, partly because of the feminist work of hooks, is not just focused on the notion of rights and access, but on the ability to "identify and eradicate the ideology of domination that expresses itself along the axes of race, class, sexuality, colonialism, and gender" (Kincheloe, 2008, p. 83).

This focus on ideology has allowed critical pedagogy to better understand how sexist oppression is based on the belief that women are inferior, primitive, less advanced, more emotional, and less rational than men. Because oppression is based on worldviews or interpretive frameworks that are internalized and perpetuated by all members of society, even those most negatively hurt by the idea, the structure of domination is always more complex than simple dichotomies suggest. Sexism is therefore not just a struggle between men and women, but it is a social system that becomes part of the cultural, taken-for-granted, hegemony of the dominant society. Consequently, women internalize and perpetuate sexism *with* men. Kincheloe (2008) interprets this insight concluding that, "ones actions in pursuit of resistance to oppression are more important than one's race, class, or gender—one's positionality" (p. 83). Not only is ideology more important than positionality when it comes to the work of resisting the doctrinal system and oppressive structures and arrangements, but their abolition (such as patriarchy) not only benefits those who are most hurt (i.e., women) by them, but those who benefit the most (i.e., men) by them are also better off under more positive conditions. hooks (2000) makes this point crystal clean in *Feminism Is for Everybody: Passionate Politics* in the following somewhat lengthy, but highly significant, passage:

> Males as a group have and do benefit the most from patriarchy, from the assumption that they are superior to females and should rule over us. But those benefits come with a price. In return for all the goodies men receive from patriarchy, they are required to dominate women, to exploit and oppress us, using violence if they must to keep patriarchy intact. Most men find it difficult to be patriarchs. Most men are disturbed by hatred and fear of women, by male violence against women, even the men who perpetuate this violence. But they fear letting go of the benefits. They are not certain what will happen to the world they know most intimately if patriarchy changes. So they find it easier to passively support male domination even when they know in their minds and hearts that it is wrong. (p. ix)

It is this complex context where those who benefit the most from an oppressive ideology and practice would actually, in the long run, be far better off if it ceased to exist, rendering hooks' feminism so foundational to critical pedagogy in general and Kincheloe's approach in particular. In *Teaching Native America Across the Curriculum: A Critical Inquiry* (Malott, Waukau, & Waukau-Villagomez, 2009), I contribute to this line of reasoning arguing that those "goodies" referred to by hooks (2000) are not as objectively beneficial as they may seem. Consider,

> While those deemed "white," on average, receive more material privileges than non-whites, most people who fit within current definitions of whiteness would also be better off without the institutionalization of white supremacy. Simply stated, a united working class/human species would be far better equipped to create a socially just world than a divided one. In *A Call to Action* (2008) I made the point that white people, while at times made to feel special or superior because we are white, have been left to rot and die of cancer at alarming rates in de-industrialized areas like Niagara Falls, New York. My intentions here are similar.

> That is, this book, in part, is designed to offer white people (and others) a worldview not based on the false supremacy of Europeans, but one that acknowledges the contributions of Africans, Native Americans, and others to modern democracy and scientific knowledge production. Solidarity, in this context, is not a polite gesture made by the assumed *superior* to the assumed *inferior*, but rather, it is an acknowledgement of the awe-inspiring achievements of the non-European world that paved the way for Europe (and those of European descent) to begin emerging from the Dark Ages—a process still underway. (p. 3)

It is within this context of universal improvement that our epistemological bazaar begins to overlap in significant ways with anarchist theory. For example, like the bourgeoisie feminist movement that ignored issues of race and class, which hooks and others confronted during the 1970s and 1980s, Emma Goldman and other female anarchists around the end of the nineteenth century confronted the sexism of foundational male anarchist scholars such as Proudhon and Kropotkin (Leeder, 1996). Making this point in "Let Our Mothers Show the Way" Elaine Leeder (1996) notes that,

> Anarchist women added new dimensions to the tradition which could not be found in the teachings of Proudhon, Kropotkin, and Bakunin. Anarchist women believed that changes in society had to occur in the economic and political spheres but their emphasis was also on the personal and psychological dimensions of life. (p. 143)

For example, Proudhon, it is argued, believed in patriarchy and that the role of women as the domestic force in life represents the natural division of labor rendering them subordinate to men and thus unable to divorce. However, Emma Goldman still drew on Proudhon's work barrowing his conclusion that *property is theft*, and turning it on the sexist discourse and practice informing it by "arguing that woman, as private property of man, was having her freedom and independence stolen" (Leeder, 1996, p. 144). Unlike the white, *color-blind* feminists bell hooks challenged in the United States in the 1960s and 1970s, Goldman (1969), a Jewish woman who emigrated to the United States (New York City) in 1885 at the age of 16, was conscious that "the true patron saints of the black men were represented" not in Lincoln who only "followed when abolition had become a practical issue" (p. 76), but in the radical white abolitionists such as John Brown and others. Goldman, as an anarchist, recognized the importance of the abolition of all forms of coercive power from capitalism, slavery, to patriarchy. One critique of Goldman's work might be that she focused on white abolitionists without sufficiently recognizing the agency and resistance of Africans themselves in America. However, because this sophisticated focus is not universal within the feminist tradition, there are those who see no future in feminism as a theoretical framework for political praxis.

For example, some anarchists, such as Susan Brown (1996), argue that because feminism does not possess, as a central, universal commitment, the overthrow and abolition of the basic structures of power, it is not able to provide the theoretical relevance to liberate all of humanity. Consequently, Brown (1996) argues for a more general theory for "human freedom" as part of the process of moving beyond feminism. While coming to essentially the same conclusion as the like of hooks and others in the resistance to a larger system of domination and exploitation— white supremacist, patriarchal capitalism—she chooses to abandon the language

of feminism for anarchism. While this might seem like a minor issue, much can be said about the power of language and the importance of naming the world and therefore the importance of calling ourselves feminists so as to name and oppose sexist oppression, calling ourselves anti-racists so as to name and oppose institutionalized white supremacy, and calling ourselves anarchists and Marxists so as to name the capitalist relations of production and oppose the process of value production. However, in the educational left there are hard, deep lines of division drawn between Marxists (including anarchists, radical environmentalists, and others who take industrialism and a class-based approach to analysis and practice) and postmodernists (including, among others, feminists and critical race theorists).

To the new generation of critical educators and those who are curious and/or interested, I say *nonsense, resist choosing sides, we should embrace our critical diversity to the fullest extent possible*. This requires humility and a refusal to take oneself too seriously. *It is, in fact, all good.* We need to realize that there are legitimate critiques regarding our own practices and conclusions. For example, postmodernists tend to be correct when they charge Marxists with being transmissive/banking/traditional in terms of pedagogy. Marxists, at the same time, tend to be correct when they charge postmodernists with not challenging the basic structures of power and obsessed with identity and triviality. I do not believe the solution is to argue the left needs to adopt a new theory. I believe the solution resides within a more conscious effort to engage in honest, critical self-reflection and not get so defensive and threatened when we are challenged. Another related component of moving forward, as suggested by the title of this chapter, is to expand and engage more critical traditions. With this spirit of solidarity in mind, let us move into a discussion of the history of anarchy and how it might contribute to our postformal, feminist approach to educational psychology.

In my study of anarchy I begin by considering the philosophical and historical roots of what we might call an *anarchist conception of human nature*. After this first section, we explore how these insights might inform a postformal, feminist psychology contributing to our move toward a new discipline. Finally, we consider barriers and challenges we will continue to face in the foreseeable future in our attempts to put into practice, as part of a larger critical education movement, postformal approaches to teaching and learning for life after capitalism and without the white supremacist, homophobic, patriarchal hierarchies of what we hope to be distant memories of a time no longer thriving. Throughout this chapter, we continue to revisit central aspects of the dominant psychological paradigm as we make our postformal anarchist case against it.

Anarchist Psychology

We begin our investigation with the scientific anarchist work of Noam Chomsky. Because there are so many talented anarchist writers, and therefore so many potential places of departure, it is worth pausing for a moment to reflect upon why

Chomsky was chosen. As not only a leading scientist in linguistics since the 1950s where he has more precisely connected the field to the essence of human nature, but also one of the world's leading public intellectuals known for his anarchist politics and ceaseless critique of US foreign policy and its ongoing *imperialist ambitions*, Chomsky's astonishing achievements and critical credentials demand we *actively* pay attention to and learn from his point of view, yet without *passively* accepting all his ideas dogmatically and mechanically. Rather, the challenge is to engage them with as much scientific objectivity as humanly possible, aware that our own subjectivities and interpretive frameworks always serve as our first lens or filter as we construct knowledge about the external world, in this case, the scholarship of Noam Chomsky (unless we are Chomsky then our task is more of a self-reflection).

Of particular importance to our present investigation are the connections between Chomsky's scientific investigations regarding human nature and his anarchist politics. As we will observe in the following discussion, Chomsky's choice to embrace and contribute to anarchism is based on his assessment that anarchy most closely matches the essence of human nature. In other words, Chomsky's anarchism, in many fundamental ways, is informed by the conclusions of science. The significance of Chomsky's work as a scientist cannot be overstated, especially situated in the context of the twenty-first century where an anti-Western science postmodernism has come to dominate critical theory. That is, while many postmodern, cultural critics, anarchist writers, and other critical activists brilliantly outline and contextualize the social context in which anarchism and other forms and modes of counter-hegemony exist through struggle, Chomsky's point of view, that is, the biological context of human nature, offers a unique perspective that I believe is valuable in constructing a postformal anarcho-feminist psychology socially situated.

Chomsky (2005) situates the heart of what I will refer to as *his anarchist psychology* firmly within the revolutionary impulse of the Enlightenment and the scientific tradition of Western counter-hegemony. While postmodernists tend to focus on the oppressive nature of how Western science has come to be dominated by imperialist and capitalist interests, they too often present this tradition as if domination over non-Western knowledge systems was all it was ever about. Chomsky, on the other hand, focuses his energy on contributing to the democratic nature of early Enlightenment science, more or less ignoring the indoctrinating and exclusionary tendencies. I include Chomsky's point of view because anarchist thought and practice, when not demonized by the *discourse of domination*, tends not to be traced any further back than to nineteenth-century anarchists, however important, such as Max Stirner, Pierre-Joseph Proudhon, Mikhail Bakunin, and Peter Kropotkin (see, for example, Guérin, 2005; Morland, 1997), suggesting that critical/revolutionary theory and the European Enlightenment, and the subsequent scientific revolution, are separate and unrelated developments. Locating the roots of anarchy within science and the Enlightenment, as argued by Chomsky, reclaims *both* anarchy from demonization *and* science from the boss's reductionistic process of colonialist wealth extraction and the subjugation of non-European-ruling elite peoples and perspectives/knowledge. That is, making these connections challenges the hyper-decontextualized reductionism that falsely disconnects science and politics.

Again, the significance of Chomsky's scientific approach is highlighted by its uniqueness. For example, while many anarchist writers correctly understand that ones' view of human nature is going to determine ones' understanding of what kind of societies humans are capable of successfully creating thereby shaping future possibilities and interpretations of historical events, they tend to fail to transgress the idea that one's conception of human nature is purely subjective and a matter of personal preference or political commitments. Representing this point of view in *Demanding the Impossible? Human Nature and the Politics in Nineteenth-Century Social Anarchism* David Morland (1997) notes that,

> . . .there is no universal agreement about the meaning of human nature. Broadly speaking, the controversy centers on whether human nature should be thought of as something innate to the entire species of Homo Sapiens or whether it ought to be viewed as a reflect of particular environmental circumstances. Human nature, it is argued, either is universal and something that is inherent in all of us, or is socially constructed within a given human and social environment . . . Political ideologies, including social anarchism often rely on a conception of human nature that draws on both dimensions of this argument. (p. 3)

The debate regarding the innate qualities of human nature in this context described by Morland (1997) tends to be centered around the issue of whether it is inherently good or evil. However, while this debate and foci are important, they fail to consider the insights of science, which, I argue, is an unfortunate oversight. It is curious that the only mention of Chomsky in Morland's (1997) book is his observation that there are too many competing theories within anarchism to be able to identify a generalizable ideology. While it is true that Morland's (1997) work is specifically centered on nineteenth-century anarchists, Chomsky, a twentieth-century anarchist, as demonstrated below, provides the Western scientific/Enlightenment link between sixteenth- and seventeenth-century counter-hegemonic scholars, such as Galileo, Descartes, and Newton, with the likes of Proudhon and others from the eighteen hundreds. In other words, Chomsky's focus not only contributes to the debate regarding human nature, but his historical contextualization offers invaluable insights for understanding nineteenth-century anarchy.

One of the clearest examples of Chomsky's historical understanding of what we might call an *anarchist psychology* is outlined in his essay entitled, "Language and freedom," originally published in 1970, but recently reproduced in *Chomsky on Anarchism* (Chomsky, 2005). What follows is therefore an engagement with an anarchist psychology taking Chomsky's work as a place of departure. Arguing that Western, "libertarian . . . thought and revolutionary acts of the late eighteenth century" (p. 102) are *echoed* within the work of Schelling (1936), who identifies the *essence* of the *human ego* as *freedom*, Chomsky (2005) locates the roots of anarchy within the *Romantic* branch of the Enlightenment. As we observe below, Rousseau, one of the principal architects of Romanticism, has also played a significant role in anarchist psychology.

Although deemed to be *not important* by many leading historians of philosophy, such as Bertrand Russell (1945/1972), Schelling, who was a student with Hegel, had such an inflated sense of self, it has been reported (see Gutmann, 1936), that his

friendships were almost always sacrificed, would be absolutely livid to know he has been reduced to the status of *unimportant*. Whether such conclusions are justified is a matter of debate, but outlining Chomsky's anarchist psychology leads us to his work nevertheless.

Highlighting the magnitude of his ego, Gutmann (1936), in an introduction to *Philosophical Inquires into the Nature of Human Freedom* (Schelling, 1936), argues that Schelling fashioned himself a leader of what he understood to be the *new* revolution that takes the notion of freedom to be the center of all philosophy and science (Gutmann, 1936). That is, Schelling argued that philosophy itself is an act of freedom, and thus the product of a *free human*, carried out by a species *born for action*, not just *speculation*, rendering philosophy's place of departure being the announcement of said freedom. The connection to the Romantic Movement within Schelling's focus on *freedom* here is instructive for understanding the philosophical roots of Chomsky's anarchism. It is therefore not surprising that Chomsky (2005) identifies Rousseau's insistence that the essence of human nature is *freedom* and *consciousness of that freedom*, which, he argues, is an endowment unique to the human species.

Examining the historical development of these ideas Chomsky (2005) locates Rousseau's conclusions that mechanical philosophy can explain nothing of our *freedom*, that is, *free will* or *consciousness*, therefore identifies anarchy as contributing to this tradition of opposing what has developed into a behaviorist ontology dominant in today's increasingly corporate-controlled system of mass schooling. That is, Chomsky (2005) notes that it is "striking" that "Rousseau's argument against the legitimacy of established authority, whether that of political power or that of wealth . . . follows a familiar Cartesian model" where "man is uniquely beyond the bounds of physical explanation; the beast, on the other hand, is merely an ingenious machine, commanded by natural law. Man's freedom and his consciousness of his freedom distinguishes him from the beast-machine" (p. 106). Any political or social system that assumes or treats the human species as not essentially free and independent therefore represents an attack on human nature.

While Descartes' conception of mind, that it is unique to the species and beyond mechanical explanation, remains intact, his conception of body has been abandoned by the scientific community. Further contextualizing this history Chomsky (1988) notes that,

> . . . The Cartesian conception of body was refuted by seventeenth-century physics, particularly the work of Isaac Newton, which laid the foundations for modern science. Newton demonstrated that the motions of heavenly bodies could not be explained by the principles of Descartes' contact mechanics, so that the Cartesian concept of body must be abandoned. In the Newtonian framework there is a "force" that one body exerts on another, without contact between them, a kind of "action at a distance." Whatever this force may be, it does not fall within the Cartesian framework of contact mechanics. (p. 143)

While the notion of gravity as *action at a distance* with a physical explanation has been widely accepted in the scientific community, the implications for the mind as a sort of *action at a distance* hold the biological explanatory key for human freedom

and therefore largely ignored. This negligence is astonishing given Chomsky's conclusion that the notion of *action at a distance* continues to be the best explanation science has for human intelligence or free will. The brain might be matter designed to produce thought electrically, but the source of that animation remains clouded in mystery. This mystery represents, for many scientists, such as Chomsky, the *limits* of our species' intellectual endowments. Simply put, there are some questions that are beyond the reach of human intelligence, such as, *What is the scientific explanation for the source of the* action at a distance *that gives animation to life?* For Chomsky, all species have limits. This should not be viewed as controversial. That is, most species of birds have built-in genetically determined navigation systems, which humans and most other species could never acquire.

Chomsky's rejection of the racist and sexist pseudo-science that attempted to manufacture consent for stereotypical differences, which led him to focus on similarities among the human species, coincided with feminist psychologists that objected to science informed by a hegemonic and thus unconscious sexist worldview. Outlining this history, Judith Worell (2000), in "Feminism in Psychology: Revolution or Evolution" elaborates in great detail:

> They pointed out that researches and the people they studied were predominately male; the topics they studied, such as aggression and achievement, reflected male concerns; and the results of research based on male samples were assumed to apply also to women. When women were studied, they were evaluated according to a male standard, so that women's personality and behavior were seen as deviant or deficient in comparison. For example, early research that focused on sex differences claimed that in comparison to men, women were less motivated to achieve, less assertive, and less proficient in science and mathematics. These presumed deficiencies were then seen as stereotypes of all women and were used to deny women entry or advancement in male-dominated employment settings. (p. 185)

Extending this *second-wave* critique of modern, Western science's tendency to produce knowledge informed by a process whereby the world is socially constructed as a series of hierarchically constructed dualities, such as *male and female* and *white and non-white*, Colleen Mack-Canty (2004) argues that *third-wave* feminism deconstructs the very notion of duality itself. Mack-Canty (2004) critiques second-wave feminism for working "within foundational Western political theories such as liberalism and socialism" (p. 155). Third-wave feminists, according to Mack-Canty (2004), on the other hand, "works to begin from the situated and embodied perspectives of different(ing) women" (p. 155). Mack-Canty (2004) identifies three main camps of third-wave feminism in the twenty-first century— generational/youth feminism, postcolonial feminism, and ecofeminism. Similarly, in *Feminist Theories and Education Primer* Leila Villaverde (2008) highlights many feminisms—Black Feminist Thought and Womanist Feminism; Latina/Chicana Feminism; Native American/Indigenous Feminism; Asian American Feminism; Islamic Feminism; Lesbian Feminism; and Feminist Studies of Men. Contributing to this epistemological diversity consider

- Theorizing the Politics of "Islamic Feminism" by Shahrzad Mojab (2001)
- Queer Black Feminism: The Pleasure Principle by Laura Alexandra Harris (1996)

- The Development of Chicana Feminist Discourse, 1970–1980 by Alma Garcia (1989)
- Postcolonial geographies of privilege: diaspora space, the politics of personhood and the "Sri Lankan Women's Association in the UK" by Tariq Jazeel (2006)
- Puerto Rico: Feminism and Feminist Studies by Alice Colón Warren (2003)
- *Politics of Masculinities: Men in Movements* by Michael Messner (1997)
- *The Agony of Masculinity: Race, Gender, and Education in the Age of "New" Racism and Patriarchy* by Pierre Orelus (2010b)

While all of these work and all of these critiques, which barely scratch the surface of all that has been produced and is available, certainly affirm Chomsky's focus on basic human similarities (i.e., a creative, self-actualizing drive), feminism emerged as part of the postmodern resistance movement against the reductionistic tendency of modern science's exclusionary and colonizing impulse. It is therefore my intention here, as stated above, to argue that Chomsky's democratic approach to Enlightenment science (rejecting hegemonic science), combined with postmodernism's challenge to the Western scientific tendency to subjugate non-elite-Western knowledge systems and worldviews, works together to form a larger, complex whole.

For example, while there are many feminisms due to the complex nature of power and culture and therefore experience, humans, in general, seem to be genetically designed to creatively use and develop the ability to instantly understand language and be conscious of our own consciousness or freedom through self-reflection, freeing us, in part, from the impulse of reaction and internal drive, which, again, it is argued, is an endowment unique to humans. In other words, even those species such as Apes that are the most closely related to humans do not possess the same genetically determined brains as us, rendering freedom and the consciousness of freedom outside their genetically determined endowments. Human nature is therefore, at its core, a question of defining the parameters of human cognition or intelligence. Because the notion of free will, for scientists such as Chomsky, is a little known property, human intelligence itself is not a well-defined property. While *human freedom*—a characteristic common to the species—appears to be a unique property, the independent essence of life is universal. That is, the primary quality of *life* (i.e., to be *alive*), in whatever species one refers, is that it is not driven or guided by external sources, even though intelligence can be manipulated. The limits and achievements of any given species are determined not by external factors, but by physical genetics, including brain structure and subsequent intellectual endowments. From this point of view the notion of race and gender are social constructs designed to perpetuate exploitative relationships with no real legitimate connection to objective science.

The above insight that intelligence is not a well-defined property and often manipulated to serve political interests of power is particularly important to education, which the hyper-environmentalism of behaviorism assumes, if not in theory, then in practice, the opposite. That is, behaviorism, and education in general, is based on the assumption that intelligence is well-defined and therefore precisely

measurable and externally controllable. However, further challenging the hyper-environmentalism of this behaviorist pseudo-science Newton's conclusions also strongly suggests that the source of our free will is not external, but is a fully integrated aspect of the living human. Science can therefore help intellectuals understand that the alienation observed by externally controlled and manipulated wageworkers is a direct, negative consequence of the oppression and subjugation of free will. If the essence of the human species is freedom, then those whose authority is derived from their association with science should, therefore, adopt the social arrangements that most centrally embrace this democratic value—as a conclusion of science with political implications, and in the current neoliberal context, revolutionary implications.

For Chomsky, as previously mentioned, these arrangements are called *anarchy*. An anarchist psychology—Chomsky's anarchist psychology in particular—is therefore consistent with accepted knowledge regarding the nature of human intelligence and free will within the scientific community. Chomsky (2005), always the rigorous scientist, rejects the use of detailed proposals to plan what a future society might look like because we do not know enough about the nature of human beings, institutions, society, and the implications of introducing humans to new social structures to validate such an approach. Rather, Chomsky (2005) suggests that the building of an anarchist society should be "experimental, guided by certain general ideas about liberty, equality, authority, and domination" allowing and encouraging people to "explore different ways of working through the maze and see what comes natural to them" (p. 221). It is within this practice that notions of *spontaneous learning* and *informal learning* take on new meaning.

An anarchist psychology is therefore based on the uncompromising respect for the intellectual freedom of the learner. The many subjugated knowledge represented within neocolonialist feminism, to take just one example, offers deep insight into the richness of intellectual freedom. It offers a global perspective that finds joy and solidarity in complexity and tension like when Noam Chomksy's over 50 years of fearless resistance to US imperialism leads postcolonial, feminist, Marxist scholar Gayatri Chakravorty Spivak to passionately exclaim in her Columbia University office sweet that she is *no Chomsky* because she comes from an elite class in India that exploited a lower class for thousands of years rendering her unwilling to forfeit complexity for unification.

However, there is a contradiction here, because of our current state of indoctrination and hegemonic internalization, most of us are not conscious of the insights offered by our unique positionalities. That is, most of us have never had the opportunity to pause and take the necessary years to reflect on the ideas, values, and beliefs of the dominant, capitalist society that we have internalized throughout our lives. As a result, capitalism, behaviorism, the idea that people need leaders because human intelligence is so extremely variable that the average person is incapable of making intelligent decisions concerning important matters, such as the structure and nature of the economy and foreign policy, have been so normalized and naturalized that we reproduce these structures without realizing it. The role of anarchist psychology, it seems, is to pose challenges to students that would require them to critically

self-reflect on the worldviews that they have acquired over the course of their life-times. Again, one of the primary reasons why this self-reflective work tends not to be practiced in schools is because of the continuing dominance of behaviorism and the banking model of education.

While the scientific community has long abandoned mechanical explanations for human consciousness, behaviorists, whom Chomsky names environmentalists because of their external explanations of human intelligence, have based their entire framework and conception of human nature on the assumption that human intelligence and consciousness possess no unexplainable force and are therefore merely the consequence of external conditioning (i.e., operant conditioning). That is, by reducing human intelligence and learning to the low-level conditioned responses performed by dogs and rats, behaviorism—which continues to be the dominant educational theory informing capitalist schooling (i.e., NCLB and Race to the Top)—ignores the self-reflective, complex intelligence, and free will that render humans a unique socio-cognitive, intellectual species. In other words, behaviorism ignores the human endowment that leading Enlightenment thinkers such as Galileo have identified as *our most noble gift* (see Malott et al., 2009). Reflecting on the insistence of certain scholars to base their behaviorist work on refuted conclusions, Chomsky (1988) provides insightful reflections:

> One possible answer lies in the role that intellectuals characteristically play in contemporary—and not so contemporary—society . . . The standard image is that the intellectuals are fiercely independent, honest, defenders of the highest values, opponents of arbitrary rule and authority, and so on. The actual record reveals a different story. Quite typically, intellectuals have been ideological and social managers, serving power or seeking to assume power themselves . . . (p. 165)

Given this hegemonic role of science in the contemporary era, it should be expected that the universities, the official centers of knowledge production, should serve the interests of power and privilege before truth and the democratic values of the Enlightenment/science/philosophy—represented in Chomsky's anarchist psychology. Because the official channels of knowledge production that are most centrally implicated in social reproduction or engineering, that is, colleges of teacher education, science alone, as argued above, are not enough to ensure structures of power are not designed to betray what we know about human nature—that is, its propensity for freedom and the creative use of labor power and language. What our anarchist approach to postformal psychology therefore needs is a political militancy in defense of science against the behaviorist tendencies of neoliberal capitalism as a current manifestation of the life and legacy of which Columbus represented. Before we move on to the next section we can summarize some of the more central ways Chomsky's anarchist psychology might inform our postformalism:

- Unlike a lot of recent anarchist literature that seems to focus on that which is out of our immediate control, such as mainstream psychology's devastating grip on not just the field of psychology but on society more generally (Fox, 2004), the driving force behind Chomsky's work, from linguistics to anarchist critiques of foreign policy, is an untiring celebration of humanity's most noble

gift—our free will—expressed through our infinitely creative use of language. From this linguistic perspective the essence of humanity is therefore *freedom*— the freedom to think, engage, and create. Social arrangements that fundamentally betray this inherently human freedom, from Chomsky' scientifically informed anarchist perspective, must therefore be condemned and deposed. For Chomsky it is Newton's discovery of the previously mentioned action at a distance that contributes to the vast complexity and sophistication of human intelligence. The Cartesian insight regarding the uniqueness of human intelligence, which Newton, to his own displeasure, affirmed, led Descartes (1637/1994) to the conclusion that "good sense is, of all things among men, the most equally distributed" (p. 3). Kincheloe's (2004a) postformal cognitive theory is based on a similar conclusion that "most students who don't suffer from brain disorders or severe emotional problems can (and do) engage in higher-order thinking" (p. 19) in their daily lives, even if not encouraged or nurtured in formalized school settings.

- Again, Chomsky's anarchist psychology challenges postformalists to be cautious when waging wholesale attacks against Descartes, Newton, and Western science in general because there are, as demonstrated above, counter-hegemonic insights too important and potentially revolutionary to disregard—the notion of *action at a distance* in particular, which could be used by postformalists to rightly argue that, in many ways, their work represents the conclusions of science than do those free-will-denying behaviorists claiming to be doing scientific work.

- In other words, postformalism, unfortunately, has too often made the same mistake as behaviorism by rejecting science. The difference is that behaviorists reject science to advance an indoctrinating agenda, but call themselves scientists, whereas postformalists reject, in many ways, Western science in the name of social justice and embracing diverse epistemologies, but do not, of course, call themselves scientists. However, I would argue that the underlying liberatory, transgressive *purpose* of postformalism and contemporary anarchist movements are essentially the same as the democratic habits of the scientific mind embodied by the likes of Galileo, and more recently, Noam Chomsky. Science, after all, did emerge in southern Europe as a revolutionary movement against the oppressive dogma, divine-right mysticism, and utterly brutal and barbaric colonizing impulse of the Roman Catholic Church.

- Anarchist theory, from a Chomskian perspective, can legitimately invoke the authority of science and simultaneously expand the possibilities for taking postformalism to the streets, as it were. In other words, anarchists pride themselves on being *practical* or at the forefront of revolutionary movement (Graeber, 2002). Postformalism, with its emphasis on democratic knowledge production as part of the process of resisting dominant forms of oppressive and coercive power, can too easily fail to move the theory and practice or critical constructivism from the classroom to other areas of society such as places of employment and public places (i.e., parks, sidewalks, streets, etc.).

Toward a New Field: A Constructed, Situated, and *Militantly* Enacted Discipline

Beginning with Kincheloe's ideas about a constructed and situated psychology, or the notion that the ideas people hold about the world, such as Western Europeans' construction of Orientalism during the eighteenth and nineteenth centuries (see Said, 1978), are not objectively fixed, but are rather socially constructed through historically developing relationships of power, is, no doubt, of extreme importance and thus a central component of our postformal approach to educational psychology. Similarly, dominant ideas about the nature of women are social constructions designed to manufacture consent for patriarchy from men and women. Postformalism therefore rejects the one right answer grand narrative ontology of formal science embracing, rather, a multilogicality that appreciates and learns from the knowledge and epistemologies subjugated, disrespected, and, in many instances, all but eradicated, by the enslaving and colonizing European forces that have transformed into neoliberal capitalism maintaining the same insatiable appetite for the accumulation of wealth that led Columbus and his hired hands to commit some of the most horrendous, barbaric forms of genocide never before witnessed by humanity.

For postformalists, learning is consequently not just the passive transmission of facts, or the objective, decontextualized cognitive development of learners, but it is a form of development that is always socially and politically mediated in increasingly complex and contradictory ways by dominant and subordinate forms of power. Continually seeking ways of seeing and logics that are counter-hegemonic is thus a drive force behind postformalism. Many of these worldviews/philosophies are the interpretive frameworks of those most oppressed and exploited women *and* men by the capitalist relations of production and the formalism of dominant society intended to normalize and naturalize the insane logics of capital.

Analysis alone, however, as our above engagement with anarchist psychology suggests, is not enough to transform the basic structures of power embedded within capitalist, industrial society. The contributions anarchist ways of seeing might inform Kincheloe and others' postformalism are particularly instructive, especially at this time of crisis when the world's people are growing ever more tired of the irresponsible practices and damages inflicted by an industrial, global capitalist ruling elite—the positivistic formalism of the boss's science for plunder.

Aware of this challenge posed by critical theory, many of us on the educational left argue that our work in teacher education challenging future teachers to assist their future students in developing critical consciousnesses and viewing themselves as creators of history rather than mere spectators or objects of historical developments constitutes action beyond analysis. On some levels this is correct. However, at the same time, our assumption that revolutionary change will automatically happen if enough people become critically conscious because of our biologically determined intelligence as a species, is, in some respects true, but at the same time naïve and I would argue even irresponsible. That is, revolution, or the displacement

of ruling class power in the form of large multi-billion and trillion dollar corporations and corporate/ruling elite-controlled governments, has historically proven to be a very dangerous and costly (in terms of resources, wealth, and human life) endeavor.

If teacher educators (and others), in sharing with the students they work with the revolutionary conclusions the evidence regarding the basic structures of power suggests, encourage future teachers to teach the importance of revolutionary action, then they must themselves demonstrate through action what this might look like in practice. The challenge, from the postformal perspective outlined in this volume, is therefore to model democratic, nonviolent revolutionary agency, or a *militantly enacted* postformal anarcho-feminist psychology. Operating within the parameters of institutional learning facilities poses significant barriers to such movement because, by design, as argued above, they are constructed against the conclusions of science to serve the elite interests of reproducing capitalist society. Aware of the domesticating impulse of institutions of education, another related barrier for the critical educator is overcoming the immobilizing fear of speaking *for* rather than *with*.

That is, aware of the historical role education has played in subjugating the knowledge of Native American and African peoples, for example, by speaking for and representing the other, many academics, especially whites, in their attempts not to reproduce this paternalistic tendency, too often resort to doing nothing as a safe way to avoid the negative effects of their internalized hegemonies. However, for the critical educator, this is not an option. For change to occur, risks must be taken, but with a persistent dedication to critical self-reflection. In our efforts to become transformative agents of change we must therefore not become too dogmatically wedded to a particular analysis or conclusion. For example, we must be conscious of the significant role of positionality in informing one's analytical place of departure.

A New Generation of Anarchists: Possibilities for an Enacted Militancy

First and foremost, we can reiterate by noting that the anarchist challenge is a challenge to more completely transgress the institutions of formalism, such as schools, colleges, and universities. While these spaces offer opportunities to produce knowledge from a diversity of epistemological frameworks, the qualitative limits to this work are defined by the institution itself. An anarchist psychology would extend Kincheloe's insistence that learning is a libidinal, full-body experience, arguing that the revolutionary development of the mind flowers into full bloom only through the collective struggle against the indoctrinating institutions themselves and the capitalist relations of production.

Offering substantial hope here in "The New Anarchists" David Graeber (2002) draws attention to the democratic organizing practices of a new generation of

anarchist challengers to neoliberal domination. Often overlooked by Marxists and mainstream, academic, critical pedagogs and demonized by corporate media as violent, Graeber (2002) argues that such a mistake could not be more serious in these desperate times. Outlining who these new anarchists are and what their philosophy has looked like in practice Graeber (2002) begins with the Indigenous, revolutionary Zapatistas of Chiapas Mexico (see Chapter 5). The Zapatistas' subjugated knowledge is precisely what Kincheloe's postformalism argues is needed at this historical juncture.

Arguing that today's global action networks against neoliberalism, such as the famous protests against the World Trade Organization (WTO) in Seattle, Washington, in 1999, can be traced to the Zapatistas' 1994 uprising and call for a worldwide network of opposition to neoliberalism, Graeber (2002) underscores the postformalism of today's new anarchists. Important here is the meaning of globalization, which has incorrectly been identified as a negative development. This analysis stems from the negative consequences of the liberalization of capital. However, the international movement of capital is actually anti-globalizing because it limits the free movement of people, possessions, and ideas across borders (Chomsky, 1999; Graeber, 2002). In other words, deregulating capital has strengthened the ruling class and, as a result, limited the freedom of people creating a less globalized world. The Zapatistas' call against neoliberalism is therefore a call for a more globalized world—a global movement against the abuses of ruling class power that takes the form of an international "network" rather than an "organizing structure" with a "central head or decision maker" and therefore has "no central command or hierarchies" (Graeber, 2002, p. 64).

Beginning with the Zapatistas' black ski masks, rubber boots, and white flags on their rifles symbolizing a paradox—guns that want to be silent—the new anarchists have embraced a playful engagement with outrageous symbolism matching the equally absurd era of neoliberal capitalism—an economic system that calls itself globalization while effectively limiting actual globalization (i.e., the free movement of people and information across borders) through such means as an explosion in the world's border guards and the restriction of immigration from the underdeveloped so-called third world to first world or industrially developed areas.

Again, responding to the absurdity of the contemporary global context Graeber (2002) points to the street pedagogy of the ridiculous where anarchists in overstuffed, padded clown costumes lob fluffy stuffed animals at riot police confusing the military minded police of the bosses. This pedagogical approach allows even the riot police themselves an opportunity to reflect on the absurdity of a system that treats humans like chattel and denies the creative impulse of the human biological endowment. Summarizing the spirit within these new anarchists, Graeber (2002) notes that, "the general anarchistic inspiration of the movement, which is less about seizing state power than about exposing, delegitimizing and dismantling mechanisms of rule while winning ever-larger spaces of autonomy from it" (p. 68) is not necessarily about rejecting all organization but is about "creating new forms of organization" (p. 70). For example, Graeber (2002) points to "spokecouncils," which are

> Large assemblies that coordinate between smaller 'affinity groups.' They are most often held before, and during, large-scale direct actions like Seattle or Quebec. Each affinity group (which might have between 4 and 20 people) selects a 'spoke,' who is empowered to speak for them in the larger group. Only the spokes can take part in the actual process of finding consensus in the council, but before major decisions they break out into affinity groups again and each group comes to consensus on what position they want their spoke to take. (p. 71)

Such organizational structure, not unlike the ancient governing model practiced by the Mayan-based Zapatistas, offers exciting prospects for what life after neoliberal capitalism could possibly look like in practice. In other words, a more horizontal and less hierarchical society is not just an impossible ideal, but is actually realistic. However, such prospects are not without real challenges.

Barriers to an Anarchist Postformal Pedagogy

The barriers to enacting an anarchist postformal psychology are many, both interpersonal and institutional. What follows is a brief summary of these two types of barriers. However, before we proceed I should pause for a moment and acknowledge that the *interpersonal* and the *institutional* are not separate and unrelated entities, but are rather part of the same larger whole. In other words, institutions exist because groups of individuals constructed them and even larger groups of individuals either support and uncritically reproduce them or challenge and oppose them. Many scholars have identified this type of relationship as dialectical because it represents a tension of competing interests where institutions determine who individuals develop into while individuals simultaneously shape institutions through both critical and uncritical agency.

Institutional

First and foremost, social structures, such as institutions of formalized education, have been constructed and developed around behaviorist models of lesson planning, curriculum development, and classroom management, and internalized by policy makers, educational leaders, teachers, students, and caregivers to such an extent that they are viewed as *just how it is* or a *non-perspective*. No Child Left Behind and Race to the Top, for instance, are examples of how behaviorist practices have been federally enforced through legislation. Of course nowhere within these examples of legislation does it say they are informed by behaviorist principles. Rather, they are presented as the objective results of what science tells us are the best methods of teaching literacy. The message is that they are not embedded with a political agenda, but represent an objective approach to learning.

Supporting this propaganda approach to education is the corporate media, which also has played a significant role demonizing the anarchist movement. Even many

Marxists use the term *anarchy* to describe that, which is assumed to be unorganized, undesirable, and unproductive, such as *the anarchy of the market*. While this tendency has historical presidents between Marx himself and prominent anarchists such as Bakunin, it is certainly not helpful to the movement for democratic globalization. However, the corporate media's attack on anarchy has undoubtedly had far greater effects than Marxists who themselves tend to be ignored or demonized by the same media outlets.

Graeber (2002), for example, points to the media's repeated insistence that the anarchists of the Seattle WTO protests were violent despite the fact they hurt no one. What the mainstream, corporate media seemed to be most frustrated with, argues Graeber (2002), was the fact that *the new anarchists* were decidedly not violent. That is, it is a lot more difficult to demonize and ignore a group's ideology and position when they are nonviolent. The mass media would have had a much easier time convincing people that anarchists were scary monsters had they actually been physically assaulting police officers and civilian bystanders.

It is therefore the challenge of critical postformal educators to demonstrate through our teaching and scholarship the practical reasons why critical theories and practices, such as anarchy, are favorable alternatives to the neoliberal order that currently dominates. People must come to understand that the current neoliberal trajectory is not only unsustainable, but it is dangerously irresponsible. The media has conditioned millions of people to equate democracy and freedom with capitalism rendering the struggle for genuine democracy an incredibly difficult undertaking. Consequently, many critical pedagogs have given up hope believing the only way paradigmatic change will come is through the catastrophic physical and economic collapse of the current system. What these institutional barriers suggest is that part of the solution requires an individual approach.

Interpersonal

While Chomsky's anarchism provides us with much insight regarding the biological context of human nature, other anarchisms and critical psychological theories are needed to better understand the social cognitive context of the mind *in* and *through* society. To begin recovering from the psychological damage done by an indoctrinating, white supremacist, patriarchal, neoliberal society necessary to more fully embrace an anarcho-feminist, postformal psychology, and critical pedagogy, we need something more. In keeping with our anarchist theme of expanding the circle of criticality, we can turn to the anarchist psychology of the late Paul Goodman (2010) who understood that conforming to this society would lead to illness, but not conforming would lead to dementia because this is the only society there is. That is, there are no other realities to escape to.

Similarly, feminist reinterpretations of Freud's work in the 1970s began to observe how women internalize sexist oppression as a result of living under patriarchy rendering the psychological life unhealthy for most women (LeLand, 1989). Others (Sa'ar, 2005) argue that the story of how women consent to patriarchy is

more complex than just the result of the normalizing consequence of socialization. For example, Amalia Sa'ar (2005) notes that some women consent to the larger system of sexist oppression because they benefit materially from their racial and class associations and affiliations. The challenge for critical educators, as suggested above, is therefore to demonstrate that the result of a world without oppression and crude exploitation would be far better for everyone, even those who currently benefit the most from the negative system that exists.

Conclusion: A Postformal, Anarchist Self-Reflection

The pressures are great living in this neoliberal, hyper-conservative US context where the value of one's identity is measured by their position within capitalist society. Based on the values of that *capitalist society*, at this moment in its development, most people are defined as redundant, losers, failures, and therefore not useful to the system. Consequently, from the dominant set of values most peoples' current circumstances are, of course, a mark of shame and worthlessness. However, from another marginalized and subjugated set of values it can be viewed as a badge of honor to refuse to participate in the process of value production/wealth extraction/plunder. As a result, we either live with those internal tensions and try to help push ahead or we resort to our capitalist conditioning and assume our tacit place within Jung's collective unconsciousness.

To be successful, radicals, especially the most privileged (i.e., white) radicals, must engage in scholarship and movement building without the romanticizing so many of us fail to correct within ourselves. Taking this precaution heightens the prospects of reaching others counter-hegemonically, which, I believe, is one of the primary responsibilities of the postformal, anarchist critical pedagog. In other words, it is our task to oppose the power structure we benefit from, which means reaching its primary supporters—white people as a socially constructed political, economic force and ideology. Otherwise, we are missionaries, and missionary ideology is colonialist. However, we do not only pay attention to white people, hardly, we also work in solidarity with diverse communities from around the world. This is fundamental to our work and global movement against power and privilege. Again, this work is not simple or clear-cut; it is complex, too easily contradictory, and never straightforward. We nevertheless continue to negotiate these spaces of tension and contradiction as we oppose dominant forms of exploitative and oppressive power—sometimes with success, and other times suffering bitter defeats, but always knowing the struggle will continue.

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