

Chapter 3

The Architecture of Power (II): Mental Health and Education

3.1 Mental Health and Dehumanization

Psychology and the other mental health professions have shortcomings that are evident in our schools. The assumptions and principles at play in psychology are lived out in our classrooms. Although psychology, psychiatry, and counseling have been used to dominate and domesticate students and other citizens, inherent in the mental health professions are liberatory impulses. In this chapter, I hope to uncover some of the limitations and dehumanizing tendencies these disciplines wreak on our students and classrooms, while offering suggestions for more democratic directions. I will often be addressing psychology or psychiatry directly, but let me warn here that I level an analysis and critique meant to apply across the gamut of mental health “sciences.”

Throughout the last chapter, we saw how an abstract individualism is reified and thumped for in Western moral, economic, and political theory. It should come as no surprise then that this same pervasive infatuation with individualism permeates the theory and practice of the mental health professions as well. For example, Seymour Sarason explains that American psychology has been marked by “a riveting on the individual organism” from the get go; that it has “from its inception . . . been quintessentially a psychology of the individual organism, a characteristic that . . . has severely and adversely affected psychology’s contribution to human welfare” (1981: 827). Robyn Dawes finds psychology guilty of adopting a framework rooted in egoistic individualism, where “a person’s interactions with the outside world—including the world of other people—are important only in the way in which they affect the internal structure of that individual” (2000: 277). The mental health professions posit that “problems and pathologies are located in the individual” (Kincheloe et al., 1999: 37). Children’s cognitive development is usually considered a solitary endeavor (Rogoff, 1990: viii).

Part of this emphasis derives from the roots of the psychology profession in the United States. Before World War II, psychological evaluations and psychotherapy were considered medical specialties conducted by psychiatrists. The war delivered thousands of suffering soldiers back to American shores, and Veterans Hospitals didn’t have enough trained psychiatrists to handle them. This, according to Dawes, was the impetus for the tremendous growth in the field of psychology in the

United States (2000: 14). Sarason depicts early American psychologists as “fiercely independent individuals” who were scrabbling to carve out legitimacy for their expanding field (1981: 831). Psychiatry accepted psychology because psychology did not challenge psychiatry directly, was deferential in that it sought to attach itself to psychiatry, and filled a burgeoning need at the time (Ibid.). Furthermore, because psychology found itself expanding amidst a hegemonic context marked by the sociohistorical imperative of abstract individualism, such an emphasis within the field could come as “natural.”

3.2 Positivism, Psychology, and Psychiatry

Psychology and psychiatry are disciplines shaped by power, a power they, in turn, perpetuate. Yet they fail to recognize their place in the soup; they do not recognize themselves as participants in the social construction of knowledge, of the acceptable and the unacceptable. That judged normal and abnormal is held to be “pre-existing, universalized, natural conditions . . . that exist separately from psychological interpretation” (Kincheloe et al., 1999: 39). For example, most psychologists see unhappiness in their “clients” as self-created, not the result of the social circumstances surrounding their lives (Masson, 1994: 44). The mental health professions ignore the relational ontologies and ontogenies. Cognitive development is essentialized such that “the social features (race, class, gender, place) that influence patterns and definitions of development are ignored, allowing what are actually social constructions to be seen as natural processes” (Kincheloe et al., 1999: 59). Masson criticizes psychotherapy as lacking interest in social justice, of implicitly accepting the status quo (1994: 285). The authoritarian relationship of analyst/therapist/doctor to the patient/client dehumanizes the later as the former judges what is normal versus abnormal, real versus fantasy. Experts are “empowered with the right to discern meaning” as modernist psychology “operates as a form of arrogant perception—an epistemological stance that approaches culturally different situations and individuals from a position of power” (Kincheloe et al., 1999: 35 & 37). Hence the universalism of Kohlberg’s or any other stage model. And at bottom these are relationships where, intrinsically, one profits from the suffering of another.

The worst facets of positivism are at play in the mental health disciplines. The veneer of science is trotted out to justify enormous conjectural leaps taken from what little science of the human mind we actually have. As Dawes (2000) explains, claims to objectivity in the mental health professions differ from claims to objectivity in the natural sciences and other fields of medicine like surgery. Where a man may be labeled “antisocial personality” by a psychiatrist, a female exhibiting similar symptoms is likely to be labeled “histrionic” (Dawes, 2000: 67). A “socially trained consensus concerning diagnosis” is the main empirical claim to objectivity in psychology, psychiatry, and the mental health field. What this means is we’re supposed to accept the legitimacy of psychology and psychiatry as fields because their practitioners most often agree with their diagnoses. But wouldn’t we be frightened of a surgeon who goes to open us up having diagnosed our malady based solely on

his reasoned opinion without recourse to x-rays, CAT scans and the like, even if his colleagues agreed with him? For the same reason, we should be wary of the way the *feelings* and *opinion* of the mental health professional constitute diagnosis.

In 1972, David Rosenhan decided to put the diagnostic abilities of American psychiatry to the test. Rosenhan went to a mental institution and claimed he heard a voice in his head saying, “Thud.” That was the extent of his symptoms, and the only other lies he told concerned his name and occupation. Rosenhan purposefully chose the word “thud” because it seemed so cartoonish. Totally coherent, reasoned, and expressive, Rosenhan, a professor of law and psychology, was admitted to the hospital as a paranoid schizophrenic. Thing is, Rosenhan had eight friends throughout the United States carrying out a similar exercise at the same time. Seven of his friends were also admitted to mental hospitals as paranoid schizophrenics, while the eighth was admitted under the label “manic depressive psychosis.”

Rosenhan and his friends enjoyed stays lasting 7–52 days. They found that once institutionalized, their past experiences were reconfigured by mental health professionals to meet the diagnosis. They found that other “legitimate” mental patients knew they were faking it. They were all released when their symptoms were declared to be in remission, not a one of them cured. Troubling enough by itself, where symptom remission is taken as an indicator of progress in medical science, psychotherapy and the other mind “sciences” do not accept it as such. In fact, individual therapists decide whether and where improvement has occurred (Dawes, 2000: 41). When Rosenhan published his paper *On Being Sane in Insane Places*, a firestorm ensued as the profession of psychiatry rounded the wagons in an attempt to discredit the man and his experiment. When one hospital promised their staff could never be deceived by such nonsense, Rosenhan agreed to infiltrate fake patients over the course of a 3-month period. When the 3 months were up, the hospital proudly reported that they had identified and turned away 41 such patients, whereupon Rosenhan admitted to sending none.

Lauren Slater recounts Rosenhan’s experiment and reactions to it in her book, *Opening Skinner’s Box: Great Psychological Experiments of the Twentieth Century* (2004). Slater herself followed up on Rosenhan’s experiment by visiting nine hospital emergency rooms, also complaining of a voice in her head saying “Thud.” Waiting on average two and a half hours in each emergency room before she was seen, none of the psychiatrists or other mental health professionals she spoke to—with no interview breaking the 13 min mark—admitted her to their hospital, but each wrote out prescriptions for her, and in the end, Slater went home with scripts for 25 antipsychotics and 60 antidepressants.

Rosenhan’s and Slater’s experiences give credence to Robyn Dawes’ charge that psychiatry’s

positivistic attempt to “locate” people on various “axes” is justified not by showing that these locations result in categories that allow us to accurately predict how people will behave with or without different treatments, but by demonstrating that when diagnostic experts are sufficiently well “trained” in using the manuals, they unsurprisingly agree about how to label people (2000: 67).

As Slater notes, “In Rosenhan’s day it was preexisting psychoanalytic schema that determined what was wrong” with the individual, whereas today “it’s the preexisting pharmacological schema, the pill” (2004: 86).

3.3 Insight, Indigo Children, and Indoctrination

Slater’s seems a growing charge against psychiatry and the mental health field. Today brain chemistry is invoked more and more to explain *who* we are and *what* is wrong with us. To chemical imbalances in the brain are attributed everything from schizophrenia to alcoholism, from obsessive-compulsive disorders to eating disorders, from anxiety and depression to violence and compulsive shopping (Valenstein, 1988: 2). If brain chemistry is the cause, biochemical explanations and drug treatments are the proffered solutions.

The intersection of the mental health professions, a biochemical culprit, the pharmaceutical industry, and the everyday classroom has its nexus in the bodies and brains of our students. Greater numbers of children are being prescribed greater numbers, quantities, and kinds of drugs. Antidepressants are increasingly being prescribed for our children, despite possible risks—including suicidal ideation (AP, 2007b: A16). Bipolar disorder is the fastest growing mood disorder diagnosed in kids, with diagnosis rates more than doubling for boys between ages 7 and 12 from 1995 to 2000 (Carey, 2007a: A11). This despite the fact that the mental health field struggles amongst its practitioners over the disorder’s actual prevalence, possible overdiagnosis, and the fact that symptoms diagnosed as bipolar disorder in kids are often nothing like symptoms diagnosed in adults with bipolar disorder (Carey, 2007b). The proffered answer to bipolar disorder: antipsychotic medications, drugs with names like Risperdal, Seroquel, Zyprexa, Abilify, and Geodon. These medications cost three to five times more than medications for disorders like depression or anxiety (Carey, 2007a). And it’s not just bipolar disorder our kids are being diagnosed with. As Benedict Carey writing in *The New York Times* explains

A child’s problems are now routinely given two or more diagnosis at the same time, like attention deficit disorder and bipolar disorders. And parents of disruptive children in particular—those who once might have been called delinquents, or simply “problem children”—say they hear an alphabet soup of labels that seem to change as often as a child’s shoe size (2006: A1).

The pharmaceutical industry spends billions of dollars a year developing and promoting their drugs, and the top recipients of their largess are psychiatrists. Psychiatrists in Vermont, for example, averaged \$45,692 each from drug companies in 2006, up from \$20,835 the year before (Harris, 2007b: A14). In Minnesota, payments to psychiatrists from the drug industry ranged from \$1 to almost \$700,000 (Ibid.). Unsurprisingly, it turns out that the more psychiatrists earn from drug makers, the more likely they are to prescribe medications including antipsychotics to children (Harris, 2007b: A14). Except it *can be* surprising because the ties between the drug industry and doctors, including psychiatrists, are not always openly advertised. Hence Isabella Bailly’s astonishment upon learning that the psychiatrist

who diagnosed and then prescribed antipsychotics for her daughter Anya's eating disorder received over \$7,000 as reimbursement for lectures from the same drug company (Johnson & Johnson) that manufactures Anya's medication (Harris et al., 2007: A1).

Increasingly medicated, our children are often on two or more drugs at a time. So-called "drug cocktails," combinations of powerful psychiatric medications, were prescribed for 1.6 million American children in 2006 (Harris, 2006: A1). Over half a million received three or more psychiatric medications, and 160,000-plus four or more (Harris, 2006: A1)—all this despite the facts that psychiatrists and other doctors do not know the effects combinations of various drugs can have on a child.

A biochemical explanation of possible mental illness is embraced for a number of reasons. For one, biochemical explanations seem to allay for many people the stigma of mental illness. A parent might feel more comfortable thinking his child's problems are due to a chemical imbalance than, perhaps, the alternative offered by society and medicine, that something is inherently wrong with the child as a human being. Further, many doctors, psychiatrists and much of science tell us chemical imbalances are to blame, and we want to believe these authority figures. But psychologists like Valenstein warn us that "the claim that psychotherapeutic drugs correct a biochemical imbalance that is the root cause of most psychological problems . . . rest on a very shaky scientific foundation" (1988: 3).

From psychologists who don't keep up on the literature to psychiatrists who really can't tell us what quantitative effects two or three or four medications in conjunction will have on our children, a marked "scientist-practitioner gap" exists in the mental health field (Lilienfeld et al., 2003: 1). Because of our knowledge in medical science, Dawes explains, we have a pretty good idea what will happen if the HIV virus enters the body, but we lack such knowledge in psychology and psychiatry. Unlike medical science overall, in psychology "[w]e believe that if we talk to people and get to know them 'as individuals,' we can understand them better than by using broad general principles and seeing how they should be applied" (Dawes, 2000: 19). What knowledge and research evidence there is in psychology and psychiatry has often been ignored or side lined in favor of practitioner insight and interpretation (Lilienfeld et al., 2003: 1; Masson, 1994: 46). The existence of the doctorate of psychology degree (Psy.D.) *without research training* is indicative of the ways in which the profession sees training and research as unrelated to their method's efficacy (Dawes, 2000: 15). Examples of insight driving diagnosis include practitioners "determining" within 10 min of meeting and speaking to someone that the person is an incest survivor (Dawes, 2000: 8). Such "intuition" can result in a therapist asking leading questions that wind up imprinting suggestions and false memories (Dawes, 2000: 31; Lilienfeld et al., 2003: 4). Psychologists like Elizabeth Loftus showed that this is possible, that memories can be distorted and false memories implanted (Slater, 2004).

Assessment techniques themselves are often questionable. John Hunsley et al. (in Lilienfeld et al., 2003) explain that Exner's Comprehensive System of teaching and researching the Rorschach Inkblot Test is marked by problems with its norms, reliability, and validity. For one, the comprehensive system doesn't have norms for

minority groups even though minority groups score differently on the Hunsely, et al., in Lilienfeld (2003: 46). The Myers–Briggs Type Indicator is a self-report test based on Jung’s personality theory. It assigns test takers to one of sixteen different personality type categories *inconsistent* with Jungian theory or the data gathered from the test itself (Hunsley et al., in Lilienfeld et al., 2003: 61).

Ignoring what mental health science we do have has opened the floodgates to all sorts of questionable therapeutic techniques (Lilienfeld et al., 2003). At a CSE meeting in my school district, a therapist told school staff they did not understand a child because the kid was an indigo child—a child with paranormal attributes including the ability to read minds and see others’ auras. A de-emphasis on research allows for a proliferation of catchy fads in mental health (Dawes, 2000: 20). There is no reputable empirical evidence supporting primal scream therapy, eye movement desensitization and reprocessing, Buddha psychotherapy, alien abduction therapy, rebirthing and a host of other pseudoscientific practices. The self-help techniques available and ever popular on books and tapes are not held up to empirical evidence. The validity of entire supposed psychiatric conditions like dissociative identity disorder (multiple personality disorder) is disputed (Lilienfeld et al., 2003: 3). Brushing what science is available aside gives rise to questionable diagnostic labels like road rage and sexual addiction (Lilienfeld et al., 2003: 3). Not to mention all the money that’s coming out of your pocket—either directly for yourself or as taxes to subsidize this wackiness.

None of this is meant as an attempt to discredit the *entire* field of mental health medicine or what empirically verifiable and replicable science there is to support practice. Instead, as Dawes warns, because we know so little about the human mind, “the more scrupulous and careful we should be in applying and monitoring what we think we do know” (2000: 19). Psychotherapy is a case in point. We know psychotherapy works, but we do not know *why* it works. We also know that the credentials and experience of the individual psychotherapists are unrelated to patient outcomes, that professional psychologists and other mental health experts are no better psychotherapists than others of comparable intelligence with minimal training (Dawes, 2000: 13). In other words, despite credentialed-practitioners’ assertions otherwise, these professionals don’t possess any special abilities as far as diagnosing mental distress in others or predicting behavior. Unlike indigo children, they can’t read minds.

Practitioners themselves often treat psychotherapy as a matter of personal judgment and supposition (Dawes, 2000: 9). At the same time, psychotherapists as a group are reluctant to admit that what they do is something others can do. Jeffrey Masson describes the “training myth” that tends to obscure what is in fact very modest training. A former psychoanalyst who grew disillusioned with the field and its foundations, Masson recalls “I spent eight years in my psychoanalytic training. In retrospect, I feel I could have learned the basic ideas in about eight hours of concentrated reading” (1994: 293). Education aside, Dawes posits that professional psychologists and other mental health experts fail to “learn anything from clinical experience with distressed people that cannot be learned by reading textbooks” (2000: 13).

So what are psychoanalysts and other mental health practitioners learning, and why do people accept their supposed expertise if their expertise amounts to little more than personal opinion? Masson likens the years of psychoanalytic training to “an elaborate indoctrination program” during which “one is learning to become a loyal member of a select group” (1994: 293–294). The therapist–client relationship is marked by paternalism and condescension, the qualities of individual therapists notwithstanding. Kincheloe suggests we view the model of the mind presented by psychology “in the same way we examine religious articles of faith”, warning we be cognizant that “as religious dogmas, modernist psychological data often serves the interests of the priesthood, the bishops/scientists who guard the holy scriptures” (1999: 42). Dawes accuses the field of psychology of peddling a belief system, “a simplistic philosophy of life” that “maintains that the purpose of life is to maximize one’s mental health, which is dependent wholly on self-esteem” (2000: 33). Modernist psychology “creates authority contexts where certified experts impose their interpretation of situations on their subordinates—clients, students, patients, or subjects” (Kincheloe et al., 1999: 37). The mental health professions ignore the sociohistorical realities of which they are a part and to which they contribute, conditions that give rise in part to our maladies and afflictions. At the same time, they ignore that to be human means to love, to delight, and to know joy, along with angst, suffering, and pain. Indeed, experience and weathering of the bad times allow for discernment and enjoyment of the good.

Human beings should enjoy the time here on earth. That’s not to say we should expect each day to be rosy, but when people suffer it is understandable and desirable to want find a way to reduce this suffering. Wracked by emotional and mental issues, we turn to the psychologists, psychiatrists, and counselors that our societies tell us are the authorities on these subjects. We hope they can help us, and sometimes, indeed, they can. Whether it’s the ear of a therapist who listens to us or the effects of a medication prescribed that eases our distress, we should always be aware that often the doctors and scientists themselves don’t know why what they do works.

3.4 Behaviorism in the Everyday Classroom

There is a disconnect today between what goes on in much of psychology and what goes on in our classrooms. Cognitive approaches dominate the psychology field and have for decades. But by and large our classrooms still mirror the influence of behaviorism in psychology. There are times and places where behaviorism has proven successful. For example, individuals have been helped through desensitization to deal with and overcome debilitating fears.

But there are many times and situations when behavioral approaches do not work. One time a small program I was involved in at my high school was told to set up a behavior plan to monitor the progress of roughly 15–20 kids. These were students who traveled from class to class with different teachers. Some of them had very little contact with me or any of the other staff meant to track their behaviors. We were supposed to judge whether they attended class, attended it on time and participated

appropriately, often when we weren't actually physically present to observe the kids. The idea was if students attained a certain number of points per week, they could participate in things like bi-weekly pizza parties. Our supervisor told us to just check in with the classroom teachers every day or ask them to keep a checklist for us.

Checking in with the classroom teachers every day isn't as easy as it sounds when each kid might have seven or eight different teachers per day. Asking a colleague to keep a checklist leads to whole other issues, such as extra work on that already hardworking person and what to do if and when the teacher isn't doing as asked. In the end, we wound up feeling our hands were tied and we were doing a disservice to the kids as our decisions about whether their classroom conduct was appropriate became increasingly arbitrary. We scrapped the behavior plan.

There were other reasons this behavior plan didn't work. Every 2 weeks, it was the same kids getting or not getting pizza. Every day it was the same kids showing up for class on time and participating appropriately or not. The kids who were going to be good and do as they were supposed were the same kids week in and week out. The three or four who were not never were and the only time the idea of missing pizza bothered them was when it was pizza-day and they couldn't have any. Even then some of their peers who had earned pizza would try and give away their second slices to these pizza-less kids. What were we supposed to do? We tried not allowing the sharing of pizza. But what were we caught up in? Here were kids motivated by their better natures, attempting to be what they saw as fair and share their pizza, and we were putting the kibosh on it. What kind of message were we sending the students about cooperation and solidarity? On the other hand, if we let so-and-so act like an asshole every week and then still enjoy pizza when some kind soul gave him some, what kind of message were we sending to the kid who acted inappropriately every day?

One thing that stuck with me from the whole episode was how the supervisors over at Central Office were happy to know a behavior plan was in place even if it didn't work. It sounded good. It looked good on paper. But it was totally ineffective. Still we were encouraged to do it. In case you're wondering, nowadays we've scrapped that behavior plan and done away with any overarching behavior plan, focusing instead on functional-based assessments (FBAs) for individual students who address specific behaviors interfering with their ability to be successful in school. Time will tell how this one goes.

Early behaviorists sought to establish psychology as a hard science, arguing and attempting to realize in their methods that psychology had to be structured along the lines of physical sciences, with the examination of observable and measurable phenomena. Where philosophers like John Dewey saw psychology as the logical next step in understanding *who* we are as human beings, behaviorism was turning its back on philosophy and seeking to align itself with the "hard" sciences (Slater, 2004: 9), hence behaviorism's emphasis on the observation and measurement of behaviors.

Behavioral theories of learning, which explain learning in terms of environmental events, often dismiss mental phenomena when it comes to explaining how we learn (Schunk, 2004: 29). John Dewey argued that everything that exists for us

exists in our consciousness, thus psychology *must* study consciousness to help us understand our existence (Martin, 2002: 102). Yet other proponents of behaviorism, like John Watson, dismissed consciousness as unreliable and therefore not worth studying, noting that “Psychology, as the behaviorist views it, is a purely objective, experimental branch of natural science which needs introspection as little as do the sciences of chemistry and physics” (Watson in Schunk, 2004: 42).

Behavioral learning theory permeates our schools and the everyday classroom. B.F. Skinner had high hopes for his behaviorist theory, operant conditioning. Skinner saw no reason why behavioral principles couldn’t be applied to the creation of a utopian society (see his *Walden Two*, 1984). Skinner viewed operant conditioning as applicable in schools. He was against learning that involved students working on assignments to avoid negative consequences such as bad grades and teacher criticism. Instead, Skinner favored teachers presenting materials in small steps; with students actively responding to the activities of the classroom and not just listening passively; that teachers provide immediate feedback to students and their responses; and that students follow their own pace in learning (Schunk, 2004: 70–71). Sad then that much of the behaviorism we see modeled in our schools ignores the high hopes of one of its leading proponents.

Yet, in other ways, ways Skinner may not have agreed with, our schools, and our everyday classrooms do mirror operant conditioning. *Positive reinforcement* involves adding something following a response that increases the likelihood of that response occurring again. Today through a behaviorist lens, we can view a community’s approbation and a student’s advancing a grade as positive reinforcement for passing scores on standardized exams. High-stakes testing can be seen to impinging on primary reinforcers: students learn that their choice of future classes and colleges, that the range of jobs and incomes available to them, that their ability to live a good life and provide one for their families, that, in short, nothing short of their *futures* may be judged on scores on standardized exams *today*.

The *Premack Principle* “says that the opportunity to engage in a more-valued activity reinforces engaging in a less-valued activity” (Schunk, 2004: 54). At one time in their lives, most students question what it is that goes on in school. They wonder why they choose to go along with it. Most of them, listening to the advice of the adults and society around them, often viewing as models of success men and women who made it through schooling, most of these students make a conscious decision to do as well in school as they can for what it will bring them in the immediate, near, and distant future.

The emphasis on standardized testing and the reality of their consequences can be seen as a form of shaping. Schunk defines shaping as “the basic operant conditioning method of behavioral change, defined as differential reinforcement of successive approximations to the desired form or rate of behavior” (2004: 59). Students, parents, schools, and communities all learn that these tests, which are imposed upon them in the guise of helping them, can actually hurt them. Thus students *learn* to want to do well on these exams, teachers teach their students how to succeed on them, schools devote more and more time to test prep, and parents and communities sanction it all.

It isn't only with high-stakes testing and the possibility/availability of future life opportunities where we see behaviorism at work in our schools. Indebted to positivism in its attempt to model itself after the physical sciences, behaviorism in schools views material to be taught as invariable and easily identified. Behaviorism views learning as the imposition of knowledge from outside a student lacking it. Behavioral approaches feel rewards, and punishments are necessary to guide human behavior. Behaviorism counsels learning content through small step increments in a linear fashion (Thomas in Steinberg and Kincheloe, 2006: 106).

Behaviorism is guilty of a form of instrumental rationality, reducing complex psychological, social, and educational issues to technical questions (Kincheloe et al., 1999: 9). Behaviorist learning theory will be in for direct critique in the next chapter when we discuss Freire's notion of the banking concept of education. But everywhere around us in schools—from programmed instruction such as scripted reading and math programs, from contingency contracts between students and staff, to behavioral objectives that shape curriculums and guide IEPs—behaviorism is alive and well in our everyday classrooms.

3.5 Intelligence and Sociocultural Context

Kincheloe claims modernist psychology ignores the “liberatory impulse” that spawned it; of joining religion and government “as another technology of hegemony”; of siding with the “needs and values of the existing social order” (1999: 40). Psychology isn't concerned with power relationships and sees itself as above such fray. The notion and uses of intelligence serve as an example of this accommodation to the dominant order and the disconnect psychology drives between the individual and the social. Alfred Binet developed intelligence testing as a way to help children in schools. Though Binet warned against attempting to capture intelligence with a single number, today we do just that when we discuss intelligence scores. Historically IQ has been an essentialist construction, with intelligence thought to be a measurable entity, the amount of *g* a person had in their head. Thing is, *g* *doesn't* exist. It was a fabrication when psychologists and scientists were pedaling it a 100 years ago. Intelligence itself is a social construction. Intelligence is culturally relative, meaning who and what is considered intelligent varies across cultures and times.

“Intelligence” serves to validate some over others. Nor surprisingly, the intelligent define what intelligence is. Kincheloe speaks of “the magical power of socio-political privilege to make one appear intelligent” with intelligence usually inhering in “the socio-economically well-to-do” (2005: 90 & 62). But intelligence is a social process and social construction. For example, some people use a language like English in a certain way which is labeled the “correct” or “proper” way by people who use it in the same manner. Others speak and write non-standard English and are dismissed as unintelligent and ignorant. White people refer to black people who speak standard English as “articulate” more so than they do other white people who speaks similarly. “When people say it, what they are really saying is that someone is articulate . . . for a black person,” opines Anna Perez (in Clemetson, 2007: 4).

Developmental psychology has traditionally focused on the individual as the basic unit of analysis. But critical pedagogy steeped in a post-formal psychology takes the social as its starting point. Barbara Rogoff explains that “development involves individual effort or tendencies as well as the sociocultural context in which the individual is embedded and has been since before conception” (1990: 28). Cognitive development or anything else is not a solitary endeavor, nor is it a question of nature versus nurture. Instead, it’s a matter of developmental systems where individual ontogeny interacts with varied developmental resources (see for example, Oyama, 2000; Lewontin, 2000). The sociocultural basis of human skills and activities—including *what* we define as intelligence—is ignored for political and ideological reasons.

Still, we all know people—students, friends, public intellectuals—who are better and smarter at things than others, who are “more intelligent” than others and ourselves. The point to keep in mind is that these individuals do not live in a vacuum. Their creativity builds on already available technologies (language, science, sport, etc.) within existing institutions (Rogoff, 1990: 197). The developmental process is fundamentally integrated with “individual effort and sociocultural activity . . . mutually embedded” (Rogoff, 1990: 25). This mutual embedment is so much so that Vygotsky argued “if one changes the tools of thinking available to a child, his mind will have a radically different structure” (1978: 121). We’ll explore Vygotsky’s contention in greater detail below, but for now consider again the differences between a child raised in a community of human beings communicating via spoken language or sign to that of a child raised by wolves.

So how does critical pedagogy approach intelligence? Teachers should come into the everyday classroom practicing a form of critical accommodation. We’ve been to college and most of us have master’s degrees. We read newspapers and books. We’re familiar with schools and the other institutions and culture of our civilizations. We have some idea of what comprises intelligence in our societies, and we see students who possess attributes that lead us to think them intelligent. We also see other students who lack these attributes but are no dummies. Something good is going on in there. Perhaps an unconventional re-examination would reveal that there is sophisticated thinking and acting at play with these students. At that point, it is up to us to “integrate this recognition of exception (accommodation) into a broader definition of intelligence” (Kincheloe et al., 1999: 15).

People in societies, cultures, decide what is important to them, *what* is worth knowing, and *how* it is worth knowing. In the West, schools serve to disseminate that which societies determine is knowledge and the best ways of knowing it. “Schooled people,” writes Rogoff, “are skilled in deliberately remembering disconnected bits of information, and are more likely than nonschooled individuals to spontaneously engage in strategies that organize the unrelated items to be remembered” (1990: 46). We often take our ability to group and categorize things for granted, but even this skill is largely socially determined. Consider an example from Glick retold by Rogoff. A researcher laid out 20 objects and asked Kpelle farmers to sort them. The researcher expected the farmers to sort them into functional groups, meaning a knife would be paired with an orange, a hoe with a potato. But the Kpelle farmers sorted

them into categorical groups, the oranges and potatoes together in a food group, the knife and hoe together in the tool group. Rogoff notes, “When questioned, the subjects often volunteered that that was the way a wise man would do things. ‘When an exasperated experimenter asked finally, ‘How would a fool do it’, he was given back sorts of the type that were initially expected—four neat piles with food in one, tools in another, and so on’ ” (1990: 53).

Even our methods of demonstrating intelligence are socially prescribed. Psychometricians claim IQ tests measure intelligence, and people accept their pronouncements as gospel truth. In America, schoolchildren are taught that the individual competing with other individuals raises her hand when she has the answer the teacher is looking for. There are other cultures in which someone when asked a question, knowing the asker *knows* the answer, will worry that providing the answer could be viewed as a sign of disrespect for the one asking or a path to embarrassment should you provide an obvious answer to what must be a trick question (Rogoff, 1990: 56). In a study of Mayan children, Rogoff (1990) found that when asked to retell a story to an adult, the children often hesitated, awaited prompts, and offered incoherent versions. It wasn’t that *they* lacked an understanding of the tale they were asked to retell. Instead, after talking to the Mayan children she observed, Rogoff determined that the children considered such an act as constituting an affront, a challenge to the adult’s knowledge, a disrespect the kids sought at all costs to avoid.

We continue to view “[i]ntelligence and creativity . . . as fixed and innate, while at the same time mysterious qualities found only in the privileged few” (Kincheloe 1999: 57). Intelligence is seen as an entity possessed by individuals in varying quantities. Some people have a great deal of it and others nary any. Intelligence as a concept has been extremely important to academics and scientists, the same people who have made careers and reputations from being identified—often with good reason—as intelligent people. It’s not that Steven Pinker and Diane Ravitch *aren’t* intelligent, they *are*. But they do not possess a quantifiable entity somewhere between their ears that constitutes their intelligence. As the example Rogoff cites above shows, dump either of them back in the 14th century and they’d likely not be viewed as intelligent. Interestingly enough, some rich people frown on “book learning” and the like, such as American President George Bush who proudly claims not to read newspapers. Money may trump intelligence in Western culture, though more often than not money is used to employ intelligence in the pursuit of more money. Psychology, with its emphasis on intelligence and intelligence testing, serves as an “excluding discipline” that distinguishes some over others (Kincheloe & Steinberg, 1999: 33).

What effect does it have on the individual when her schooling has no relationship to the real world? What does it do to one’s motivation and inspiration when the everyday classroom is foreign terrain disconnected from one’s everyday life? All too often subject matter and the way it is taught is divorced from the realities of our students and our own lives. Kincheloe speaks of the condition of “cognitive illness,” where “meaning is undermined, and purpose is lost” (1999: 9). We are encouraged to think as competitive individuals. We are taught that good school performance includes memorizing facts, discerning authority figures points of view

and then spitting these back at them. We accept as just another example of the way things are that school and work are mere means to ends, unrewarding in and of themselves.

3.6 Dialectical Constructivism and Embodied Cognition

Psychology and psychiatry have become in large parts structures of dehumanization, locating failure, and affliction in the individual while totally ignoring the social milieu, propagating a faith and obedience in an authority that is often unwarranted, with diagnosis and treatment increasingly driven by crass commercial interests. But neither needed to turn out this way, nor must either remain this way indefinitely. To help everyone involved realize their potential humanity, these fields need to be democratized. There should be no room for profit from other's misery. Jeffrey Masson (1994) offers alternatives to \$125 an hour psychotherapy sessions. Masson sees self-help groups for people with a certain problem run *by people with that problem* as a step in the right direction. This would entail us reaching out to one another, human to human, maybe in coffee shops, maybe in halls, but not necessarily in a doctor's or therapist's office. If we'd just stop to listen to one another, to communicate and take a genuine interest in other people because, like us, they are people, we'd realize that most of us at one time or another in our lives experience symptoms that a psychologist or psychiatrist would diagnose with some fancy term from the DSM-IV and probably prescribe some pill for. Instead of placing the authority of professional practitioners or limited science on a pedestal, we'd do well to take what science we have and the insight of people experienced serving those with troubling issues or people who'd once experienced these troubling issues first hand and use that to our advantage. Communication and action, co-involvement as human beings *with* human beings and not as patient and doctor or as expert and sufferer, these are what are needed here.

Psychology and psychiatry do what they do in our classrooms today, from the proliferation of medicated youth we serve to the meta-narrative of behaviorism that shapes our students, our schools, and our lives. Again, more democratic alternatives can be theorized and have been. The remainder of this section will focus on the ideas of the Russian psychologist Lev Vygostky, how his ideas pertain to our humanity in general and our classrooms in particular.

Dialectical constructivism is a learning theory and a philosophical position, an epistemological position. We usually view learning as vicarious learning. Students learn what the teacher teaches them, usually with minimal performance on the students' part. Dialectical constructivism doesn't dismiss vicarious learning but it also embraces *enactive* learning, learning from one's actions and their consequences.

Dialectical constructivism holds that our knowledge comes from interactions *between* people like us and our environments. Our constructions do not only reflect an external world independent of our cognition of it, nor do our constructions come solely from the workings of our minds. Constructivism sees knowledge as a

working hypothesis. Sure we “know” things, but the things we know are always open to testing and questions (a hallmark of the scientific method by the way, in case anyone would accuse critical pedagogy or dialectical constructivism of relativism). Constructivism rejects the idea that scientific truths are out there awaiting our discovery and authentication. Scientific truths are lived, experienced, and just because we all experience a certain “truth” in a similar manner doesn’t mean we are tapping into some objective reality about that truth. For example, humans see with a color spectrum where other animals see in black and white, shades of grey. It *isn’t* that color resides in an object and that humans are just seeing more of the truth of that object’s coloring than are other animals. It’s that this is how *human animals* see an object versus how a dog or cat sees the same. Constructivism views people as active learners who must construct knowledge for themselves. Similar to other leaning theories like social cognitive theory, constructivism posits that people, behaviors, and environments interact to help us know what we know (Schunk, 2004: 287). Dialectical constructivism is a philosophical position and learning theory that holds profound democratic potential.

“All seeing is essentially perspective, and so is all knowing,” wrote Nietzsche (1956: 255). Apart from sounding dangerously relativistic, what substance is there to this claim? When Joe Kincheloe (2005: 21) notes that “all knowledge is socially constructed in a dialogue between the world and human consciousness,” what does he mean and what are the limits to the social construction of knowledge? Is the world as we know it independent of the knower? Not exactly. Human beings and other living systems effect their mediums, their environments, and these mediums in turn effect the living system (Maturana, in Thompson, 1987: 75). Our knowledge and cognition is embodied. We perceive and experience things the way we do because of interactions between our worlds, our bodies, and our brains, not because of some simple reflection of an external reality. Francisco Varela describes embodied cognition as the laying down of a world (in Thompson, 1987: 62).

How far does this go? It’s one thing to refute “facts” or to interpret the same event in different ways. Thus the American atomic bombing (the only time nuclear weapons have been used against civilian populations by the way) of Japan is seen as either a necessary step in avoiding an island hopping mop-up operation that would have resulted in a million dead American lives or as a means of deterring the Soviets on the cusp of the Cold War (Alperovitz, 1995). But what about the stuff of the natural sciences, the “hard” sciences? Lakoff and Nunez note that “our ideas are shaped by our bodily experiences—not in any simpleminded one-to-one way but indirectly, through the grounding of our entire conceptual system in everyday life” (2000: xiv).

Color serves as a vivid example. We see colors as a part of things but colors do not exist in the external world. Our bodies and brains function in the world and have evolved to create color the way we see it (Lakoff & Johnson, 1999: 23). On a clear day, the sky appears blue. But the sky has no reflective surface for a color to inhere in. Our color vision is a “synchronic construction,” neither completely “out there” beyond us in the physical world nor completely “in here” within our brains and bodies (Thompson, 1987: 22). Our color concept is interactional,

having arisen from the interactions of our bodies (with three kinds of color cones in our retinas), our brains (with neural circuitry connected to these cones), electromagnetic radiation, and the reflective properties of objects (Lakoff & Johnson, 1999: 24).

Similarly, knowledge in general is not out there, Platonic, disembodied. And it isn't completely subjective residing within us either. Varela, Thompson and Rosch posit, "knowledge depends on being in a world that is inseparable from our bodies, our language, and our social history" (1992: 149). Thus "color is a function of the world and our biology interacting" (Lakoff & Johnson, 1999: 25). We see the way we do and dogs see the way they do. There are different perceived worlds of color for humans versus dogs versus fish because of our different histories of structural coupling with the world (Varela et al., 1992: 183). We humans see a blue sky because that is how we have evolved to see it. Dog, fish, or human, "perception is not simply embedded within and constrained by the surrounding world; it also contributes to the enactment of this surrounding world" (Varela et al., 1993: 174). This is what Varela and his colleagues means when they write that the knower and the known relate one to the other in "mutual specification" or "dependent coorigination" (1993: 150).

3.7 The Zone of Proximal Development

Starting with social activity as his unit of analysis, Lev Vygotsky saw all learning as mediated learning, and hence all development owing to social stimuli. When Vygotsky said that all learning is mediated learning, he meant that "*human learning presupposes a specific social nature and a process by which children grow into the intellectual life of those around them*" (1978: 88). The things we learn, whether a child at school learning her A, B, Cs or you at home picking up a how-to manual to help you hook up your TiVo, all this knowledge is mediated by others, and as Vygotsky recognized "[t]he path from object to child and from child to object passes through another person" denoting "a developmental process deeply rooted in the links between individual and social history" (1978: 30). This is a dialectical process in that even the person ostensibly doing the teaching *is learning*, as the elementary teacher sees in what ways her students best grasp the alphabet or the writer of the how-to manual learns from the experience of writing and revising her book. Even learning on your own (supposedly) is mediated learning because you're using the tools of your culture to learn, like language.

One of Vygotsky's most well-known ideas is that of the zone of proximal development (ZPD). Unfortunately, it is an idea that is often taken out of context, isolated and construed in ways that undermine the remainder of his theory and practice. Vygotsky defines the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (1978: 86). The ZPD

measures “mental development prospectively,” defining “those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow” (1978: 86–87). Tests are invoked today to give a snapshot of what a child supposedly knows at the moment. Tests are not used to measure ZPD but to “determine the mental development level with which education should reckon and whose limits it should not exceed” (Vygotsky, 1978: 89). Vygotsky understood the importance and uses of quantitative data, but he also appreciated and valued qualitative information. A ZPD framework would not abolish testing, but more organic and holistic assessments like student portfolios and teacher observations/anecdotes would be used to show progress. In an era of standardized test scores and number crunching, the enormity of the challenge facing proponents of dialectical constructivism in a Vygotskian frame should be apparent.

The ZPD is a challenge to the actual developmental level that is usually measured by grades and scores, be they Regents exams or intelligent quotients. The way we test and measure students now is geared toward ascertaining “the level of development of a child’s mental functions that [have] been established as a result of certain already *completed* developmental cycles” (1978: 85). Psychometric and classroom testing tends to measure what it is a student, alone, can do at this moment. ZPD is concerned with what a student can do in the future with guidance and as a result of guidance.

Well, what can a child do and how is that determined? We learn and develop in sociocultural settings that are not static. Barbara Rogoff notes that children learn a “cultural curriculum,” that “from their earliest days, they build on the skills and perspectives of their society with the aid of other people” (1990: 190). Children develop in a milieu replete with other human beings and social norms. One’s culture makes available certain tools through which we learn and develop. Language and speech, for example, are cultural tools. Children learn to use language and speech to think. Vygotsky was clear that if the tools for thinking available for a child change, that child’s mind would have a radically different configuration (John-Steiner & Soubberman, in Vygotsky, 1978: 126).

Maybe you’re wondering what the ZPD looks like in practice? Consider how we normally assess student learning. “[I]f we offer leading questions or show how the problem is to be solved and the child then solves it,” explains Vygostky, “or if the teacher initiates the solution and the child completes it or solves it in collaboration with other children—in short, if the child barely misses an independent solution of the problem—the solution is not regarded as indicative of his mental development” (1978: 85). The point of the ZPD is that such a solution *should be* indicative of a student’s development. Vygotsky with his ZPD recognized the importance of human interaction to learning and development and how intrinsic imitation is to being human at a time when psychology in general was ignoring imitation solely in favor of a child’s independent activity as a gauge of mental development (1978: 88). Behaviorists rebuffed the idea that imitation is an instinct. Watson argued that imitative behaviors were trained behaviors, learned behaviors. A week ago my 10-month-old son started to feed his mother and me watermelon. We didn’t teach him that. He

experiences our feeding him watermelon in his high chair and started offering us watermelon on his own, imitating what we do with him.

Perhaps an example with some detail will further elucidate the ZPD concept at work. How do children learn to speak? We already know from linguists like Noam Chomsky that children are genetically disposed to learn a language. A kid growing up in Japan will learn Japanese. Take that same child at birth and have her raised by a German-speaking family and she will learn German. But take that same child and deposit her by herself, or with as little human interaction and communication as possible, and the child will not learn to speak. She may yell and grunt and squeal like other non-human animals, but she won't be like Tarzan in the jungle hanging out with apes speaking fluent English or some other language. The context of human interactions, sociability, and communication provides the impetus for the development of speech in the child.

We talk to ourselves all the time and it's never a problem unless, as the joke goes, we find someone answering back. Where does inner speech come from? Vygotsky directly challenged the notion that inner speech preceded social speech, arguing in fact that inner speech is a *product* of social speech. Children grow up surrounded by adults who are talking (or signing in deaf families). They do not and cannot understand all the words and much is lost on them. But slowly, little by little, they come to understand the meaning of first one and then more words. Children do this in a sociocultural setting surrounded by the artifacts of their societies. For example, a child in his pack and play (they were called play pens when I was little) sees something he wants outside his reach but grasps for it anyway. His father sees the grasping and interprets it as an indication that the object is what the child wants, so he gives the object to the baby, probably identifying the object by name ("Here's your Elmo toy") or some nonsense signifier ("Here's your binkie"). Later the child begins to understand the significance of his gestures' communicative power. Before he can speak, he understands what "Elmo toy" or "binkie" signify. With time, when he wants an object he gestures to an adult first, not the object. The child is "the last person who consciously apprehends the meaning of his own gesture" (Kozulin, in Vygotsky, 1986: xxvii). In time, he will be able to say "binkie" or "Elmo toy" and then he will be able to think it silently in his own head. Adults and other children around him interpret the gesture and teach the child its meaning and what it can bring about.

Children grow up surrounded by others talking. Children start to imitate the speech of those around them. Right now my wife and I have some pretty interesting conversations with our toddler son. We talk to him, I in English, Myoungmee in Korean, and he screeches, coos, warbles, and nyah-nyah-nyahs back at us. It's not that he's *trying* to communicate with us, he *is* communicating with us. I could try and be cute and write that we don't understand a word that he is saying, but anyone who has cared for an infant or pre-verbal child can attest that they are very capable of expressing themselves, their feelings, and their emotions.

Children hear the adults around them speaking and start to imitate what they hear. Some of this imitation is meant to communicate wants, needs, and states. But

they also talk aloud to themselves, about themselves, about what they are doing, about how others relate to themselves, egocentric speech. Eventually, they start to internalize this egocentric speech, which marks the beginnings of inner speech. For Vygotsky, social speech gives way to egocentric speech, and this gives way to inner speech (1978: 27).

When socialized speech is turned inward, a child's ability to solve problems improves. Language becomes a problem-solving tool. Vygotsky noted that "The most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence, occurs when speech and practical activity, two previously completely independent lines of development, converge" (1978: 25). Less we underestimate the significance of this development, Vygotsky posits that "as soon as speech and the use of signs are incorporated into any action, the action becomes transformed and organized along entirely new lines" (Ibid.). At a certain point, children facing a task—say playing with a toy—speak aloud about what they're doing as they do it. Vygotsky sees "their speech and action [as] part of *one and the same complex psychological function*, directed toward the solution of the problem at hand" (1978: 26). Further, the more demanding and complex an action the child is engaged in, the greater the significance of the speech involved, with "*the relative amount of egocentric speech* [increasing] in relation to the difficulty of the child's task" (1978: 26–27). Vygotsky noted that "[s]ometimes speech becomes of such vital importance that, if not permitted to use it, young children cannot accomplish the given task" (Ibid.). Even as adults, we often talk ourselves through difficulties whose solution may not be apparent.

Early on speech accompanies a child's actions. Their speech may appear disjointed and rambling as they set about solving a perplexing task. But things don't stay this way, with Vygotsky noting "the relation between speech and action is a dynamic one in the course of children's development" (1978: 27). What happens and what Vygotsky is talking about is that speech begins to move until it eventually precedes action. A child can plan what he wants to do, figure out how he wants to go about a task, *before* he does it. Previously the execution of a task and his talking about its execution accompanied one another. Vygotsky provides as an example little children who name their drawings after they draw them and see what they have drawn, versus older children who are able to say, "I will draw a house" and then draw what is supposed to be a house (1978: 28).

Vygotsky remained adamant that learning precedes development because learning creates zones of proximal development (1978: 90). Language, for example, starts as a child's means for communicating with his environment, but with time language becomes internal speech and is used to organize the child's thoughts, becoming an internal mental function (1978: 89). In this way, language and speech can be seen as psychological tools that aid in the development of other mental functions. "[L]earning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers," explains Vygotsky. "Once these processes are internalized, they become part of the child's independent developmental achievement" (1978: 90). As the example of language acquisition and use illustrates, learning is

not development but “properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning” (Ibid.). In fact, Vygotsky states, “the only ‘good learning’ is that which is in advance of development” (1978: 89).

Because Vygotsky saw learning as necessarily preceding development, he was against universal stages models like the ones offered by Piaget in his time or Kohlberg’s supporters today. Learning and development are socially situated and the historical circumstances that condition human opportunities are always changing. Hence, as John-Sterner and Souberman explain, for Vygotsky, “there can be no universal schema that adequately represents the dynamic relation between internal and external aspects of development” (in Vygotsky, 1978: 125). Learning doesn’t set its sights on a new developmental stage; development is made possible only when learning has made possible hitherto nonexistent zones of proximal development.

Just as learning is socially mediated, so are attention and memory. When adults carry infants around, we point out and name toys, the cupboard, the refrigerator, “objects and places of adaptive significance,” thereby helping the child ignore other features of the environment, like books and tools, that are not relevant to him at that point. In this manner, the infant and child’s attention is socially mediated, and her socially mediated attention will develop into a more independent and voluntary attention over time, an attention the child will use to organize and catalog her environment (John-Steiner & Souberman, in Vygotsky, 1978: 128). Likewise memory is socially mediated because adults and their peers teach children means for remembering, things like (for example) mnemonic devices (Ibid.: 125).

In an era when test scores mean everything, much human development is ignored. Play is often written off as a frivolous waste of time in schools, at best an extracurricular activity or something appropriately engaged in at home. But play was a central concept for Vygotsky. He viewed play as something that gives children pleasure, but more than this he saw play as “a leading factor in development” (1978: 99). Children have needs and some of these needs can be realized while others go unrealizable. Vygotsky saw play developing in children at the same time they developed “unrealizable tendencies” (1978: 93). Unrealizable needs are addressed by play, in the process giving birth to imagination, which Vygotsky saw in young children as “play without action” (Ibid.).

Play’s importance cannot be over stressed. At first young children’s motives and perceptions are tied together. A child sees a door and opens it. But play transforms this connection. My brother and I threw blankets over the couch and in this way transformed them into forts. The child “sees one thing but acts differently in relation to what he sees” and “a condition is reached in which the child begins to act independently of what he sees” (1978: 96–97). Play separates thought from objects and gives rise to action from ideas and not things (1978: 97). So for some children, a piece of wood is a piece of wood, but with imagination that piece of wood becomes something else.

Self-mastery is made possible through play. Games have rules and young children can’t play certain games because they often ignore rules so as to immediately satisfy their desires. But children learn that if they ignore the urge for immediate

gratification, they can enjoy a greater pleasure in playing a particular game than they otherwise would not have been able to (1978: 97). Through play, children develop self-control and willpower. Play encourages a child's imagination and the rise of abstract thought as play "teaches her to desire by relating her desires to a fictitious 'I,' to her role in the game and its rules" (1978: 98). Play creates a zone of proximal development. In play "a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself" (1978: 100). Instead of dismissing play off hand, play should be respected from a developmental standpoint as "creating an imaginary situation can be regarded as a means of developing abstract thought" (1978: 101).

What we are as individuals and as a species emerges through our interactions with others and our environments and the cultural tools available to us. We are not isolated individuals. Language, memory, attention, and abstract thinking are all mediated and situational. Who and what we are depends on our relationships. Enactive learning allows for our development. Mental health fields that locate failure and illness in the individual seek to domesticate the individual to the hegemonic ideology of our times. Through critical accommodation, we must value the contributions brought to the table by our embodied cognition and cast a critical eye to received wisdom. The ties that bind us and allow for our development are social ones, and to ignore them is to turn our backs on what makes us human and holds out the promise of our future greater humanization.