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Linking Anthropogenic Climate Disruption and Critical Pedagogy

Streszczenie

ANTROPOGENICZNE ZMIANY KLIMATU A PEDAGOGIKA KRYTYCZNA

Ideologia neoliberalna wzywa do kapitalistycznej produkcji bez ograniczeń i regulacji prawnej. Kierowana jest przez posiadaczy i menedżerów kapitału, którzy bogacą się na dzierżawach, pracy klasy pracującej oraz na manipulacjach rynkami finansowymi. Część tego bogactwa jest przeznaczona dla sprawującego władzę rządu, by obniżyć kontrolę i podatki oraz powstrzymać wzrost płac i zawiązywanie związków między członkami klasy pracującej. Żadna wspólnota, czy środowisko zorganizowane poza interesami sprawujących władzę nie leży w obszarze ich troski. Kiedy dystrybucja dochodów i bogactwa jest tak zaburzona jak dzisiaj, ludzie stają się „przezroczyści”, niewidoczni w optyce celów związanych z kapitałem; stają się czymś (środkami) do rozporządzania. Ponadto, jeśli nie mają stałego zatrudnienia, nie są mile widziani we własnej wspólnocie. Wykształcenie ich dzieci jest postrzegane jako zbyteczny luksus, za który zarówno oni, jak i ich przełożeni, nie chcą płacić. Ludzie zaczynają zapominać o swoich niezbywalnych prawach, natomiast historia pokazuje, że musi wystąpić przywódca myślowy by doprowadzić ludzi do swego rodzaju umoralnienia, sumienności, skrupulatności (*conscientization*), jak to w swoim czasie uczynił Paulo Freire. Trwające antropogeniczne zmiany klimatyczne (*Anthropogenic Climate Disruption – ACD*) są produktem ubocznym braku kontroli nad kapitalizmem; stanowią również globalne zagrożenie dla cywilizacji. W artykule proponuje się odwróconą relację między demokracją a antropogenicznymi zmianami klimatu; głosi się tutaj, że powiązanie „radikalnie nowej krytycznej” pedagogiki z ACD może być lekarstwem powstrzymującym szybką degenerację życia. Wymaga to szybkiej reedukacji nauczycieli i rodziców do przyjęcia innego porządku: chodzi o ład wykraczający poza pewniki pozytywizmu oraz mierność w głównych środkach przekazu; taka reedukacja ma służyć temu, aby poprowadzić nowe pokolenie w zrównoważonym kierunku, który sami powinniśmy obrać wiele dekad temu.

Słowa kluczowe: działanie, autorytaryzm, *Bildung*, kasyno-kapitalizm, hermeneutyka krytyczna, demokracja, sieci etniczne, fundamentalizm wolnego rynku, materializm hedonistyczny, hegemonia, odwrócony totalitaryzm, *phronisis*.

tłum. Małgorzata Przanowska

To be, or not to be, that is the question –
 Whether 'tis Nobler in the mind to suffer
 The Slings and Arrows of outrageous Fortune,
 Or to take Arms against a Sea of troubles,
 And by opposing, end them?

Shakespeare, *Hamlet soliloquy/then and there*

The multitude are muted by the few who have caused this great suffering in the course of corruptly redoubling their wealth by plundering the commons. The extremely wealthy amplify the voice of their skills to interpret the plight of those they have so arrogantly muted with a demonizing, false hermeneutic that obscures true understanding of their thieving with fungible truths. However unlikely noble it may be for me to suffer slings and arrows of outrageous neoliberal fortune, it is my affair and not the place of those who make me suffer to say so. If it is noble for me to take arms against a sea of troubles, that is also my affair, and it is not the place nor privilege of those who cause my suffering to opine on my efforts, except in the course of confession and diminution of their totalizing treachery. My existential dilemma in this moment of structural genocide is to find the best course of action to prevent the dehumanizing of the children in our lifeworld – now that the Iroquois wisdom of seven generations forward has been squandered through the conjoined mass murder of democracy and climate. It is out of this predicament that I write on, to find ways to join the equifinality of critical, pedagogical, and constructivist arms while suffering with and for the many in these dark times.

Shuster, *Carbon soliloquy*

Anthropogenic Climate Disruption (ACD)

It could be said that a fundamental and ethical question regarding human life on earth is, 'Am I my brother's keeper?' – the answers to which appear to divide the world and gridlock societal humanism. Some may assume there to be an instinctual proclivity for some of the needy to answer yes, and for some of

those who have more than they need, to say no – each perhaps out of self-centered drive or primitive need for self-preservation. Others may equivocate or see no rational explanation for this Manichaeian division in empathy other than the outcome of a game theory. Yet others may see the balance of these opinions in the public sphere falling along the proportion of those who have or have not received hermeneutical and or theological guidance as part of their character formation (*Bildung*), or at least some epiphany of grace on the road. The centuries of theological and philosophical debate and dialogue on this focal point are long in the literature; however we have reached an historical moment in which a colossal shift in action on this very question is imperative. Ambivalence of the wealthy class toward the poor and middle classes is genocidal and out of control; and their wealth grows unabated (Piketty 2014).

Modern civilization is now taken to its late stages through the neoliberal paradigm with its massive, global, and unprecedented assault on the climate; and yet the moneyed power brokers controlling governments, industries, and financial institutions continue building an infrastructure that insures runaway “casino capitalism” (Giroux 2011). Incessant neocolonial development of markets, through forced conversion of indigenous, self-sustaining populations into individual consumers dependent on those markets for goods and jobs to pay for them, creates endless demand for more production and dispersal of its byproducts into the air and water that sustains biological life. As we approach seven billion living souls on Earth – analogous to an autocatalytic chemical reaction – the accumulation of capitalism’s by-products in a finite vessel such as Earth restricts kinetic energy in large mammals. Concomitant with environmental degradation is depletion of soil and available land from biofuel production, drying aquifers, shrinking forests, spreading hunger, disease, and violence – all while the world human population grows by 80 million per year (Brown 2011: 12–15). At the same time it is through mass media, pedagogical control, and financial manipulation that the hegemony ‘convince’ and entice the populace to continue on this lemming run known as anthropogenic climate disruption while the ‘elite’ feed their own addiction to accumulating and hoarding unearned wealth through despoiling the commons and our children’s future – because they can.

Anthropogenic greenhouse gas emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely

likely to have been the dominant cause of the observed warming since the mid-20th century. (UN Climate Report Summary 2014: 4–5)

ACD is now passing critical stages of no return and is accelerating the decline of civilization as we know it. There is no ‘dialysis’ to clean the atmosphere in time to save millions of *disposable lives*¹ in the coming decades – lives not deemed useful to the neoliberal agenda of global domination, as evidenced by the neglect of Hurricane Katrina victims. Relaxing in their slumber of amusements – much like the allegorical frogs in warm water – today’s consumerist masses show signs of effort aversion to challenging the inertia of neoliberal, fascist, authoritarian governance; and they are easily dissuaded from discussing it in the Panopticon (Giroux 2014; Foucault 1977; Bentham 1787) of modern surveillance for fear of dystopian laws, loss of their jobs, or simply falling out of favor with their neighbors. If there is to be a salvation from this *inverted totalitarianism* (Wolin 2008), it will urgently require emancipation from our personal enthrallment with materialism. It must begin with restoring social memory of true democracy in the classrooms and homes of tomorrow’s citizens through a radical and critical pedagogy.

Democracy

Democracy is intrinsic to *critical* pedagogy; it identifies certain pedagogies as critical; and it must always be attended as such in conversations about critical pedagogy. Cultivation of the capacities for children and youth to have convictions and think critically about those who hold control of the cultural apparatuses that affect their lives is ‘critical’ to their life, liberty, and pursuit of happiness. Two obvious examples of this control of cultural apparatuses are the fact that the mainstream media never use the word ‘neoliberalism’ and often rhetorically equate democracy with capitalism with little discussion of ‘capitalism’ *per se*. Giroux (2015) has called Fox News America’s Pravda, and has said: “People should have power over the institutions that affect their lives.”

¹ The term ‘disposable lives’ as used in the context of neoliberal imperialism was introduced by Michel Foucault. “Launched in January 2014, the histories of violence ‘Disposable Life’ project interrogates the meaning of mass violence and human destruction in the 21st Century. Inviting critical reflections from renowned public intellectuals, artists and writers, this three year project will feature a series of monthly filmed reflections...” can be viewed at <http://historiesofviolence.com/specialseries/disposable-life/>

The linkage of ACD and critical pedagogy is easily found in the neoliberal history of American education. Former president of Harvard University, James Bryant Conant unfortunately praised Alexander Inglis (1918) as a revolutionary architect of modern, industrialized, compulsory schooling. Inglis' six-function² *actual* purpose for compulsory education is here described by John Gatto:

1. The *adjustive* or *adaptive* function. ...to establish fixed habits of reaction to authority. ...precludes critical judgment completely. ...destroys the idea that useful or interesting material should be taught...
2. The *integrating* function. ...the conformity function...to make children alike as possible. ...of great use to those who wish to harness and manipulate a large labor force.
3. The *diagnostic* and *directive* function. ...to determine each student's proper role. ...by logging evidence mathematically and anecdotally on cumulative [permanent] records.
4. The *differentiating* function. ...children are to be sorted by role and trained only so far as their destination in the social machine merits – and not one step further.
5. The *selective* function. ...refers...to Darwin's theory of natural selection as applied to ...the "favored races." ...by consciously attempting to improve the breeding stock. ...to tag the unfit – with poor grades, remedial placement, and other punishments – clearly enough that their peers will accept them as inferior and effectively bar them from the reproductive sweepstakes.
6. The *propaedeutic* function. The societal system implied by these rule will require an elite group of caretakers. ...a small fraction of the kids will quietly be taught how to manage this continuing project...to watch over and control a population deliberately dumbed down and declawed...that government might proceed unchallenged and corporations might never want for obedient labor. (Gatto 2009: xvii–xix)

The likelihood of an informed, free thinking populace of civic-minded citizens forming a democratic society from this educational system is nil. The state that educates its young in this manner is a fascist state serving corporate masters, not its people. Such a state has the power to assert metaphors, definitions, and terms like *democracy* and *freedom* to its own purpose and needs, and there is not a critical mass of people educated enough to dissent. Other words like *hegemony* disappear from the public media.

We, like those in all emergent totalitarian states, have been mentally damaged by a carefully orchestrated historical amnesia, a state-induced stupidity. We increasingly do not remember what it means to be free. And because we do not remember, we do not react with appropriate ferocity when it is revealed that our freedom has been taken from us. (Hedges 2014: np)

² In Inglis' original 1918 text these six functions are listed in pages 375–383.

“Societies can vary in both the extent and the intensity of their commitment to democratic practice” (Young 2002: 5). George Orwell (1946: np) said, “It is almost universally felt that when we call a country democratic we are praising it; consequently, the defenders of every kind of regime claim that it is a democracy, and fear that they might have to stop using the word if it were tied down to any one meaning.” The word democracy as known to free people for *rights* equality has been given a new inverted meaning by neoliberal capitalists disabusing the one described in the US Constitution and the Universal Declaration of Human Rights in favor of asserting its opposite – the *rights* of the free market (Ranci re 2007; Chomsky 2014). Naomi Wolf (2007: 128) said “Democracy depends upon accountability; accountability requires us to be able to tell truth from lies; and to be able to tell truths from lies, we all first must agree that truth matters.” She also said, “If the ground of democracy is truth, the ground of dictatorship is assertion. In a dictatorship, reality belongs to whoever has the greatest power to assert” (Wolf 2007: 129).

Why, in *Animal Farm*, do the pigs, the ruling caste, erase elements of their mission statement and then deny to the other animals that they have done so? Not simply to advance a specific outcome but also to make the other animals lose their ability to trust their own judgment. (Wolf 2007: 129)

The recent theatrical gridlocking of Congress in the US serves to buy time for more indoctrination with pacifying, ideological doublespeak; for deepening generational amnesia; and for increasing surveillance to control individual lives and prevent collective action. The only sanctioned call to action is to be consumers until we die or go broke; and be silent, passive, disposable commodities ourselves along the way – and that is not democracy. The market is non-ethical – it only knows supply, demand, and growth. It is absurd to equate democracy with capitalism yet that is what the neoliberal ideologues have done and the consequence is emergent global environmental disaster and human tragedy. Cornel West (2004) points to three causes of democracy’s arrested development and impotence in America: “a callous free-market fundamentalism, an aggressive militarism, and an insidious authoritarianism” (jacket note).

We are not our brother’s keeper, despite all the strident oratory that would have us believe this nation actually stands for something beyond bedrock greed, lazy coddled indolence, and bluejeans on the cheap. That much, at least, was proven on Tuesday. (Pitt 2014, comment on the US midterm elections)

Young people have in past times of foment been at the forefront of demanding democracy as was the case in the 1960s. Recent decades have seen the corrupted media distract the young with hedonistic materialism that has stolen their natural drive to be curious, engaged citizens concerned with democratic values and other people's needs. This in turn has atrophied their ability to mature into actualized adults with agency in their communities – leaving them with an unnamed grief and multiple addictions to dull the pain of a meaningless existence that cannot be repaired with more sex, glamor, gadgets, and amusements. “This disgraceful numbing of the senses, dulling of the mind, and confining of life to an eternal present – with a lack of connection to the past and no vision for a different future – is an insidious form of soul murder” (West 2004: 176). Without our youth on board there can be no true, lasting democracy. With the rise of private, for-profit prisons competing for more inmates for growth – and meaningful employment being off-shored – American and European youth are being targeted for incarceration for trivial offenses. Self-destructive drug use, associated violence, and suicides are increasing among youth and young adults. The only way out of this dilemma is to construct a radical and critical pedagogy that can *decommodify* children and youth. Restoring democracy and saving our youth go hand in hand in pulling back from the brink of environmental and societal collapse.

Critical Pedagogy

Parents and teachers must grasp the fact that mind numbing consumerism is imbedded in the homes and classrooms of children, and that it is there, and in their own minds, where ferocious, radical change must begin. Parents and teachers must *learn together* with the children, throughout primary and secondary education, how to persevere, adapt, and sustain life under new circumstances. Children without parents or with unavailable parents must be provided with advocates or coaches in daily proximity (such would be a more apt use of the term ‘no child left behind’). All forms of competition, ridicule, and ideology should be set aside for sustained dialogical engagement of students with each other, their teachers, and their parents or advocates.

Researchers can provide teachers with cognitive resources and constructivist forms of critical theory that use hermeneutic styles of inquiry for *teaching against the grain* of tradition (Simon 1992). Philosophy, social studies, geography, history, music and art must be brought back to the classroom to help transition every-

one back to the idea of interdependence, life-long autonomous *and* collaborative learning, and community building by providing diverse factual grounding for reflection within non-shaming dialogic spheres of guidance.

Undergraduate education will be vital to build on this work during the final years of youth development and should be a normal extension of high school for all arts and trades. Study of sustainable agriculture and *convivial*³ practical arts that align with employment in ACD amelioration and low carbon, sustainable industry can provide a complementary praxis for agency, interdependence, community building, and a reified *Bildung* where espoused values are tested; and where trusted, informed feedback is exchanged. Balancing body and mind, left and right brain thinking, praxis and theory, analysis and synthesis, rhetoric and dialogue, oral and manual arts, large and small muscle group activity, aerobic and anaerobic exercise, quantitative and qualitative inquiry, male and female perspectives, white and non-white perspectives, able and disabled perspectives, etc. all provide fertile ground from which to form character, citizenship, and democracy.

Curricula built around critical thinking that make space for linking to each student's passions are needed. Supporting that can be reading assignments that alternate between subject texts, literature like George Orwell's *Animal Farm*, Harper Lee's *To Kill a Mockingbird*, and Herman Melville's *Moby Dick*, and topics of interest by each student. Each society has access to its true history to be compared with neoliberal revisionism in its classrooms. American students can use Howard Zinn (2003, 2007), Chris Hedges and Joe Sacco (2012), and Oliver Stone and Peter Kuznick (2012). Story-telling, improvisation, and collaborative play-writing are critical to the encouragement of life narratives and provide substance for ongoing dialogue. Service learning and walkabouts can be used at almost all mid to upper grade levels to help students experience being a living part of a larger community. Older students can coach and mentor younger ones daily; and can reinforce their own learning and leadership development by helping younger students understand material assignments and by leading group research projects linked to, and citing, previous projects from the same school. Throughout childhood and youth it behooves great teachers and great parents and advocates to revisit Batesons's (1972: 9–58) seven metalogues with students using different modalities (reading aloud and discussing analogs from experience, recital in class with teacher commentary, writing personal metalogues, engaging

³ Ivan Illich (1973: 6) chose “«convivial» as a technical term to designate a modern society of responsibly limited tools”.

in dialogical metalogues, etc.). Using the metalogues as a common tool in school can encourage students to use it among themselves in normal discourse.

Göran Therborn's (2013) *The Killing Fields of Inequality* is an up-to-date, concise yet comprehensive, global and historical, data driven account of inequality paralleling that of Piketty (2014) in scope. Therborn has documented the shortened and stunted lives of the growing populations of the unequal and impoverished over time and around the world. Through his work teachers and parents can learn and teach children and youth to distinguish all the dimensions of inequality to find their place together in its emergent repair. These dimensions include three types of inequality: *vital*, *existential*, and *resource* inequality (p. 53), and three institutional platforms that abide its persistence: *family*, *capitalism*, and *nation* (p. 168).

Scaled to their respective ages, children and youth together with their small, local communities of learning and action comprised of student-teacher-parent triads can discover Therborn's *direct agency* and *systemic dynamics* of his four mechanisms of inequality reproduction: *distantiation*, *exclusion*, *hierarchization*, and *exploitation* (p. 62); and of his inverse, equality reproduction mechanisms of *approximation*, *inclusion*, *de-hierarchization*, and *redistribution & rehabilitation* (p. 64). Along a continuum of sophistication, students can reflexively grasp the more subtle methods employed by neoliberals such as *sundering* (p. 22), *squandering* (p. 28), and of *dictamin*⁴ (p. 32). They along with their parents and teachers can progressively discover the vital distinction between (inherited) *difference* and (invoked) *inequality* (p. 37), the moral significance of John Rawls and Amartya Sen (p. 41), and the heterodox economics of Thomas Piketty (2014), Joseph Stiglitz (2012), and Paul Krugman (2004).

Understanding and calling out the names of the subversive methods of social control that sustain inequality brings them out into the light to be questioned, discussed, and challenged within all age cohorts. Together with traditional critical theory, and combined with the gleanings of race theory, feminism, and myriad, emergent discoveries like institutional violence (Giroux 2011) and epistemic injustice (Fricker 2007), youth and young adults supported by their parents and mentors, can attain the critical conscientization needed to force corporate executives to respond in the public arena of social media – not the mass media the neoliberal elite control – to questions like why do they continue to produce non-durable, consumerist, bubble-wrapped junk from fossil fuels while leaving all the process externalities on the ground, in the water, and in the air that

⁴ Authoritative enunciations of political agents and bureaucrats.

drive anthropogenic climate disruption, while stuffing the money – saved from not abating their pollution and not paying sustainable wages – into their personal coffers and those of politicians.

A valuable source of insight for construction of pedagogy is to study the outcome of previous pedagogies in adults. A number of organization development theorists have indicated a paucity in the number of managers who can think at higher levels of abstraction as a process of adult learning and problem solving. Gregory Bateson (1964) developed a theory of learning as a framework of nested recursions he named *Levels I, III & III*.⁵ At Level I the learner makes simple response decisions among options. Level II learners think reflexively about the process of Level I before concluding what options are available. In similar fashion, Level III learning is meta to Level II. Bateson warned that Level III learners are exceedingly rare and he said not enough was known about that level of evolvment to safely attempt to achieve it without further study. Learning Levels I and II correspond with single-loop and double-loop learning as described by Chris Argyris and Donald Schön (1996) who first identified the shortage of double-loop (or deutero-) learning in organizations. A simple example of single-loop thinking might be the practice of *doing things right*, whereas double-loop thinking might lead to *doing the right things right* – thus the recursive nature of reflexive thinking. In the case of school children, single-loop learning is *rote learning* and double-loop learning is *learning to learn*, which requires teachers who know how do it themselves and lead students to it. Including exercises in reflexive thinking at an early age can remediate society's shortage of double-loop learners and prepare the next generation for future insights into Level III learning which is likely to be critical, abductive, generative, dialogical, ethical, collaborative, complex, and organizationally embedded deutero-learning. As Level III or triple-loop learning emerges it must be claimed by common people, teachers, parents, and managers; and carefully attended with conscientization to protect it from instrumental abuse.

Older high school students and college freshmen should become practiced in double-loop learning, and be introduced to the notions of *undiscussability*, *espoused theory vs. theory-in-action*, *the ladder of inference* (Argyris 2010); and the role of *commodity fetishism*, *reification*, and *instrumental reason* in the *rigidification* of culture (Žižek 2000). They should discuss the lifework of Abraham Lincoln,

⁵ In a literature review on triple-loop learning, Paul Tosey, Max Visser, and Mark Saunders (2011) show that Bateson listed a Learning Level 0 as simple, non-elective stimulus-response (such as one sees with amoeba), and a Learning Level IV as conceptual only and unlikely to exist in individual humans.

Mahatma Gandhi, Dietrich Bonhoeffer, Ludwig Wittgenstein, Hans Georg Gadamer, Mother Teresa, C. Wright Mills, and Edward Snowden. Undergraduate sophomores and juniors should become familiar with critical theories of the state, Jürgen Habermas, Antonio Gramsci, Walter Benjamin, Joseph Stiglitz, and Amartya Sen. Future parents with this kind of education can elevate children's consciousness beyond the consumerist drivel many of today's children are mired in.

Mature students can learn to take action with theoretical tools such as systems theory (Senge 1990), complexity theory (Stacey 2003), and techniques of leadership and management (Stacey 2012). Researchers can prepare curricula for advanced students to explore Charles Sanders Peirce's (1958) principles of *abductive reasoning* and the *abductive analysis* of Iddo Tavory and Stefan Timmermans (2014) to find the linkage of social identity to creativity and new theorization.

Phronesis

Phronetic social science is deliberately not focused on outcomes of over-riding theories or laws, but on pragmatic outcomes of understanding in particular contexts and situations, and judgment that is deontic and moral. It is therefore, "centrally about producing research that has relevance to decisions about what can and should be done, and also how to do it" (Schram 2012: 19). Unlike *epistémé* "it is not just about what is true, but also about what it would be good to do in given circumstances" (19), and unlike *techné* "it is concerned with evaluating and prescribing goals as well as selecting means" (19). "Phronesis is useful because it gives us permission to finally abandon the failed project of producing a social science focused on universal truths, broad generalizability, prediction and a stance of disinterested neutrality" (Eubanks 2012: 228) traditional to the natural sciences.

Given the increasing counterproductivity of fixed rules in our shifting *white water* social environment (Vaill 1996), students will need to rely on their own *ethical networks* to help them attune their stock of *pattern recognitions* (Schwartz & Sharpe 2010) to discern contextually appropriate and adaptive behaviors that align with the values of their immediate community. Contingent new rules and "common sense" will be held more tentatively. "Rules – even good ones – do miscarry. They can't substitute for good judgment, and they won't work well without it" (Schwartz & Sharpe 2010: 110). Pedagogies that prioritize judgment over rules are needed in the current historical moment. Having older peers and

caring adults demonstrate and acknowledge trust within each child's ethical network insures healthy pattern formation through dialogical reflection of real-time, shared experiences. Embracing diversity in the network integrates issues of difference and prejudice through the conversation and links them to social justice and critical theory.

Aristotle's idea of *phronesis* can be adapted to the present day to mean 'practical wisdom gained through experience' as well as 'doing right things right' for the context at hand as suggested by Schwartz and Sharpe (2010). Phronetic teachers and parents can collaborate to provide meaningful experiences for reflection by children and youth. They can also share readings and blog together to discuss writers like bell hooks (1994, 2003, 2010), Joe Kincheloe (2005, 2008), David Bohm (1996), Henry Giroux (2011), and Richard Sennett (2003, 2006) and how they relate to the pedagogy they are engaged with; to compare notes; to remain engaged; to demonstrate the collaboration they are teaching; and to fuse horizons with each child and their community. Each school or community should develop and document their own living pedagogy structured around critical theory principles of emancipation and equality, and emergent situational needs. This pedagogy must be a mutable, ongoing, generative, and public project advancing on its own experience; and fully, recursively engaged with the current students, parents, and teachers pressing forward with phronetic double-loop learning and adaptive action.

The parent-teacher-student triad can invent novel spheres of learning activity within "zones of proximal development" (Vygotsky 1978) for proposal to the class regularly. This scenario is most likely to first be constructed in the form of a home schooling cooperative in the vicinity of a college or university that can provide libraries, research, advocates, and teaching interns. Phronesis cannot be mandated – only embraced as an ontological way of being a teacher, parent, or mentor committed to right thinking and action.

Critical hermeneutic inquiry is an essential part of critical pedagogy in general and of phronesis in particular insofar as it informs the practitioners (teachers and parents) of power dynamics underlying their work together. Long before introducing older students to critical hermeneutic inquiry per se, teachers and parents should aspire to learn and use this reflective, interpretive practice together to discern the thick context of each pedagogical predicament they encounter – to see who is privileged and who is marginalized, what actions constitute violence, who manipulates what and why, etc. Critical hermeneutics is an attitude toward understanding one's own ontological standing with that

of another, and of one's culture in terms of equality and relative agency. That understanding is reconstituted with every new interpretation of the objects that appear and reappear as phenomena in our lifeworld. Every text reread, every phone message replayed, every artwork reinterpreted, and every behavior reconsidered shape a new horizon that travels before us like a shadow, changing with our accumulating prejudices and presuppositions. Each new apprehension is a part to be contrasted with the whole sum of our increasing worldview that reveals ever-changing, situational realities of our existential being. "Critical hermeneutics involves understanding how power inscribes the word and the world to shape the nature of how human beings make sense of it" (Kincheloe 2005: 20).

Another parallel component of critical pedagogy is the generation of knowledge through critical constructivism. The student of the future must participate in constructing actionable knowledge with whatever idiosyncratic perspectives they have to offer amid the shifting contingencies of their lifeworld. The memorizing of static facts and normative ideas has limited utility in today's rapidly changing social and ecological environments; and online repositories like Wikipedia and Wolfram Alpha have replaced the need to do so. Today's vehicle and repository for knowledge is the narrative – shared dialogically in speech, text, and or graphic, and flexibly modified for new situated action.

It remains as important as ever to document emerging knowledge in some way (snapshots as it were) to see where it came from, and to extrapolate where it may evolve because time binding (Korzybski 1995) has a way of abstracting some knowledge into the future and losing some along the way. Going back to try previously untaken turns in research is a valuable exercise for students and should be done with social justice projects.

Critical constructivism becomes an epistemology focused on the individual's process of constructing, not reflecting reality. It is a hermeneutic orientation as it views knowledge construction as an interpretive process. Such an interpretive process produces contextually specific, not universal and timeless, knowledge. Such constructivist knowledge is culturally negotiated and, unlike objectivist knowledge, is not produced by isolated individuals. (Kincheloe 2005: 13–14)

Interpreting the inscriptions of hegemony on their daily life, students with the assistance of phronetic teachers and parents can assemble bricolage of work-arounds to maintain their autonomy and agency within their immediate community. Slowly from a grass roots level this process can become a transparent movement that can erect a true, deontological democracy.

Capitalism

Pedagogy projects of this nature are constrained by capitalism's entrenched economic and political conditions enforcing neoliberal education policy. Amid growing economic inequality and declining social mobility, poverty is on the rise, and budget restrictions and debt on personal and institutional levels are increasing such that only the projects of the hegemonic class get funding. Richard Murphy (2014) observes that these phenomena begin and end in the mind of humans.

Debt and poverty only exist because we have collectively agreed to let them exist, and as such could be collectively solved with nothing more than agreeing to change our collective mind – nothing in the physical world actually needs to change. We are in our current state because we are all convinced to accept a view (or economic system like capitalism), perhaps by tradition or by those who benefit from sustaining the belief. Because so many world problems were created in our mind, perhaps the solution needs only to come from the mind. (Murphy 2014)

The impoverishment of the bottom half of society is directly a result of decades of environmental abuse brought about by the greed of the military industrial complex having ignored all costs external its bottom line. When the only cost accounted for a gallon of gasoline is that for drilling and delivery then the costs of air pollution and disease are thrust on the commons. When gas companies frack beneath people's homes, they are only concerned with the drilling and pumping expense and not the suffering of people ingesting their by products and the destruction of livable land. When coal companies flatten mountain tops to extract a single layer of consumable and polluting material, and pile the 'debris' in the valleys, they are not concerned with the ecological destruction left behind in their scavenging. All along the way there has been little mitigation of the externalities of air and water pollution and damage to human life; and there is little hope that things will change without a dramatic shift in consciousness. People addicted to money and power are incorrigible – and under the current system use their power to assert. Phronesis is anathema to the mind corrupted with neoliberalism.

John Gardner's (1968) prescient article "America in the Twenty-third Century" takes a retrospective narrative on the late twentieth-century from the future predicated on historical cycles of tyranny and renewal. It described our current predicament as decline into barbarism and authoritarianism lasting two centuries until people "were again allowed to study history." Asking why we couldn't see where things were going when the signs were all around, it replied, "in that

troubled time there were men who were saying just what we are saying now. And had they been heeded, the solutions we have reached would have come 300 years earlier. But no one was listening.”

Initiating an educational cooperative movement with critical pedagogy and funding it becomes a ‘chicken or egg’ dilemma vis-à-vis the mindset of the normative mono-culture that has permitted capitalism to exceed its utility to community. Do we change minds in a culture that has forgotten history and mindlessly pays to be commodified and governed by corporations? Or do we build working communities of practice (Wenger 1988) that provide unexpected relief from postmodern malaise and pause to reflect on their own agency? While the political blather goes on and on about if we are our brothers’ keeper, let us at least agree to keep the children and help them mature as healthy adults to sort it out with us and for us; even if it requires Herman Melville’s (1853) *Bartleby the Scrivener*’s⁶ stand. This could be the last opportunity to do so. In any case, phronetic thinkers, conscious students, and empathic adults must with courage link *Arms against a Sea of troubles, And by opposing, end them.*

Conclusion

Phronetic teachers with the support of parents who take their responsibility to their children and community seriously have the power to lead students to assume agency and democratic responsibility in the world as early as they are capable; and to become producers of actionable knowledge and moral action. These learning triads can eschew mass media, the trivial distractions of free-market liberalism, and the oppression of neoliberal pedagogy to create a critical pedagogy of life-long learning and emancipation. Where successful the child can escape the violent trap of disposability to live a meaningful life that contributes to social justice, and sustainable life for all.

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⁶ H. Melville (1853), *Bartleby, the scrivener: A story of wall street* (in two parts). New York: Putnum’s Magazine. In this short story, protagonist Bartleby was a clerk who chose to disengage with his oppressors by responding “I’d prefer not to” to all directives that didn’t seem moral or just. This story reminds of the Occupy Movement.

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