

The Polycrisis and Adult Education Futures: The Transformative Work of Relationality

Elizabeth A Lange

Institute of Sustainable Futures, University of Technology Sydney and, Athabasca University

Land Acknowledgements

I need to be true to where I live. As part of the practice of truth and reconciliation in what is now called Canada and as part of decolonial futures, I acknowledge that I am settler of Eastern Germanic origins who grew up in the traditional lands of the Plains Cree in Treaty 8 territory. I have close associations with the Maskwacis Cree as friends and Teachers. My grandparents settled close to their reserve which meant our histories intertwined over several generations. I give thanks for their friendship and generosity and for the privilege of living in their territory, where the bones of my family also rest. I now live in the unceded territory of the Coast Salish in the Pacific Northwest. I give thanks daily for the incredible abundant beauty of this Land and its peoples, including the richness of their Traditional teachings. I acknowledge the violence of ongoing colonialism and racism as well as the daily daunting challenges Indigenous peoples face, here and globally.

What is Required of Us in This Historical Moment?

In a land known for its ice and snow, Canada has just experienced its warmest winter on record. Generally, the coldest months are December to February, yet we have experienced the warmest weather these months in 77 years of record-keeping (Macdonald 2024). On average, Canadian temperatures were 5.2 C warmer than the winter norm (Shingler 2024). Very low snowpacks have not only meant skiing and other winter sports were uncertain this winter, but drought in the agricultural sector has farmers selling off livestock and rethinking crops and wildfires have already started early spring. New species of insects, birds, and mammals are migrating north, changing their ranges

either in latitude or in altitude. Drinking water is increasingly threatened with additional usage restrictions, despite normally vigorous Canadian rivers. Over 100 forest fires continued to burn across Canada throughout the winter. In the past few summers, giant fires have hit the Arctic leading to the mass evacuation of the capital city of Yellowknife, as well as devastating whole towns from Fort MacMurray to Lytton. More furious hurricanes swept part of a Newfoundland town out to sea and levelled many forests in Nova Scotia. No matter where you are, you can likely relate.

While I do not normally start an article with depressing storytelling, we, as educators, must take an honest look at these complex realities to understand what is required of us in this moment. These Canadian events are consistent with the World Meteorological Organization announcement stating that 2023 was the warmest year on record, with an estimated global average near-surface temperature at 1.45°C above the pre-industrial baseline. We have nearly reached the Paris agreement of holding global warming to 1.5°C or well below 2°C. Additional global records have been broken in terms of ocean heat, sea level rise, Antarctic Sea ice loss, and glacier retreat (Shingler 2024). Most of global warming is absorbed by the ocean, over 90%, which has warmed the top metre by 1°C from preindustrial temperatures, leading to new marine heat waves, loss of coral reefs and sea life, further feeding the conditions for extreme weather events (Mortillaro 2024).

While everyone is impacted by these environmental and climate changes, included the monied and power elites, it is the most vulnerable who suffer the deepest and longest-term impacts—from heat- and smoke-related illness/death to trauma, displacement, joblessness, and homelessness (Agyeman 2013; Walters 2022). Fleeing climate hot spots is now one of the top causes of refugee creation (UNHCR 2023).

We are well into the climate change era, an existential moment for current generations. We are the transitional generations who are the decisionmakers for the future of the planet and our human successors. What is required of us as humans in this time? More specifically, what is required of us as adult educators? These questions are particularly poignant as life on the planet, which has developed over millions of years and through numerous extinction periods, faces another profound challenge to existence as we know it. In this, social, ecological, economic, and cognitive justice are integrally woven together. This paper will consider these aspects of justice while posing some possibilities for adult education futures.

It's About Carbon, But So Much More

We are witnesses to an epochal shift that has multiple facets. The first facet of this epochal transformation is moving from the Holocene geological period where the Earth's environment has been unusually stable over the post-glacial 10,000 years to what Crutzen and Stoermer called the Anthropocene era in 2000. It is so called as eight billion humans have become a biophysical force changing the context of life on Earth since the Industrial Revolution in the late 1700s, including its composition and functioning (Crutzen and Stoermer 2000; Folke 2013). This time frame has been verified through glacial cores and lake bottom studies. They concluded, "To develop a world-wide accepted strategy leading to sustainability of ecosystems against human induced stresses will be one of the great future tasks of [human]kind" (Crutzen and Stoermer 2000, 18).

The Stockholm Resilience Centre (Richardson et al 2023) recently reported that we have pushed six of the nine living systems past their normal operating parameters into the zone of risk. In addition to *climate change*, this includes:

- *biodiversity loss* at unprecedented rates, the largest loss of life since the dinosaurs;
- *land use changes* converting wildland into agricultural land and shrinking available habitat;
- freshwater use changing natural hydrological cycles;
- *biochemical flows* where fertilizers have polluted air and water with high levels of nitrogen and phosphorous;
- ocean acidification where the ocean absorbs too much carbon, slowly changing its chemistry;
- *aerosol particles* in the atmosphere which are beginning to impact cloud formation and thus water cycles; and
- *novel entities* such as plastic pollution interfering with natural processes.

One piece of good news is that *ozone depletion* has been reversed since the 1987 Montreal Protocol when it garnered concerted global action. While the Stockholm Resilience Centre (2023) takes a systems approach to understanding the interactions between all these planetary systems, they have indicated that climate change and biodiversity loss are the two most critical and intersecting planetary boundaries requiring significant global effort.

Until 2030 has been called the *decisive decade* where what is required is that humans pull their activities back within Earth's regulatory capacity (IPCC, 2023). Placing 30% of the planet's land and waters under protection by 2030

and reaching net zero carbon emissions by 2040 is vital for attenuating the damages of overshooting boundaries, as the base requirement for life as we know it. There has been concerted effort by many nations, cities, and regional communities which inspires some hope. There is halting progress toward these goals, with the results only now becoming visible. Just as climate change is accelerating due to self-amplifying positive feedback loops, it is hoped that climate actions will also self-amplify over the next two decades.

Dealing with carbon emissions and biodiversity loss are critical in the short term, but this is not just a technical problem requiring the usual technological solutionism. The logical end of hegemonic late-stage capitalism, industrial extractivism, and colonial modernity is a polycrisis: combined climate, ecological, economic, political, cultural, social, and cognitive crises. Using systems thinking, a polycrisis is defined as "a single, macro-crisis of interconnected, runaway failures of Earth's vital natural and social systems that irreversibly degrades humanity's prospects" (Homer-Dixon et al 2022, 3). Thus, this long-term epochal shift has another facet, a civilizational facet. "Our very 'civilizational model' — the 'modern colonial capitalist patriarchal' world system" is now in question (Kothari 2019 in Lange 2023, 335). As adult educators, developing a historical understanding in an ahistoricist time and a sociological imagination in an individualist time can be considered part of what is required.

Revolt of the Elites

Milan Babic (2020) summarizes that the Western liberal international order, largely in place since 1918, is in crisis. It has been comprised of a market-based economic model led by the United States (post-Bretton Woods which had fixed exchange rates), global-level institutions (ie. the United Nations), liberal representative democracy, and a civic culture (via citizenship and voluntary associations). The constellation of principles has included "economic openness, rule-based international relations, security cooperation, openness to reform and change, and solidarity within liberal democracy" (Babic 2020, 770). While contradictions have always been present, since the 2008 crisis of the financial system and Great Recession, more turbulent elements and fault lines are increasingly visible. This prompts questions of whether there is a possibility of "renewal and reorganization" or an inevitable breakdown with a new equilibrium eventually emerging (Babic 2020, 767-768). Certainly, as we soar past many planetary boundaries with increasingly catastrophic events, many scientists and social scientists predict a breakdown to some degree, as current institutions and systems will be stretched to their breaking point of wellresourced responses (Hansen, 2009; Homer-Dixon, 2006).

While the "revolt of the masses" was feared in the early 20th century (Ortega y Gasset 1932), Lasch (1993) argues that it has been the "revolt of the elites" in the late 20th century that have been hollowing out the middle class and democracy. Harvey (2007) explains that the liberal era of the social welfare state, when it reached economic stagnation, high unemployment, and soaring inflation (stagflation) but also a rapid expansion of social benefits and citizen participation, threatened the elites both politically and economically. From the 1970s, neoliberal societal experiments soon became orthodox economic practice through painful structural adjustment, austerity, and shock therapy programs, in the reassertion of class power. Keynesian policies which had focussed on full employment, economic growth, and citizen welfare, ensuring a "web of social and political constraints and a regulatory environment" (now charged as the interventionist state) and supporting all forms of popular organization, including through adult education, came under fierce economic and ideological attack.

As Harvey (2007) recounts, the notion of freedom was reshaped away from the notion of a social compromise between capital and labour with constraints on individual and corporate behaviour. Rather capital was disembedded from any constraints, utilizing a conception of freedom as the free market. The rights of private property, individual freedom (focussed on the market not politics or social life), and entrepreneurial virtues were embedded throughout societies. Libertarianism was promoted through education, media, and the law including of security, freedom choice, minimal government, ultranationalism. As Mayo (2019) explains, the framing around education shifted toward responsibilisation where education is an individual not social responsibility. Education provision was highly focused on jobs, skills, and attainment, a consumer view of education, despite the "cry of the many indignados" who despite higher qualifications could not expect a standard of living equal to preceding generations (Mayo 2019, 54).

Now, we were all to be entrepreneurs, including scholars as part of the knowledge class, in seeking out funding then commercialization of knowledge for profit. "Confronting trade union power, attacking all forms of social solidarity that hindered competitive flexibility" was core to neoliberalism. Rather than a balancing of individual and social goods, an extreme form of individualism was promoted, including personal (not social) responsibility and family values where the family is to provide social and health supports for members not the state. Several generations now have matured with the neoliberal project as their assumed reality, with no other reference points.

In multiple neoliberal economic experiments first in Chile then Iran, Western and "developing" nations then Russia and China, the result has been increasing economic and social inequality through obscene concentrations of wealth and power within the top elites but also the handmaiden management classes who share in these profits. Increasingly authoritarian and coercive states are accepted, seen as necessary to achieve freedom of global capital accumulation for the elites. As part of consent creation, the desires for fabulous wealth are manufactured, in part through the emulation of the latest consumer style peer pressure. Distrust and cynicism about the liberal international order has been systematically promoted among non-elite classes, well illustrated by the Trump era and January 6 attempt to overthrow American election results.

In the growing gulf between poverty and wealth, the promised trickle down has not occurred, even in the Global North. The middle/working classes are not sharing in the vast fortunes of the 1% accumulated through the real estate, finance, technology, media, and energy sectors. The non-elite classes are increasingly financially strapped, by contingent work, falling real wages, and now the post-pandemic inflationary spiral with soaring food and housing prices, further hollowing out of these classes. Lasch (2006) suggests that the upper 10-20% educated elites who serve the neoliberal global economy tend to affiliate internationally, circulating in their own world of money, glamour, knowledge, and popular culture. They have a growing disdain for the shrinking middle/working classes, especially for their more conservative often less informed thinking about the substance of public policy, and their reactions against growing cultural and moral relativism (Lasch 2006, 6, 11, 13).

As part of the neoliberal turn, the labouring classes involved in agriculture, forestry, mining, and oil/gas production have been polarized against environmental and climate actors. Green public relations focussed on misleading facts and pseudoscience which contested climate science, especially when it demanded changes in production that would compromise profits. Yet, industry understood that they "cannot win purely with a public relations drive and therefore need to initiate a pro-industry activist movement not only to win the public's hearts and minds but to fight the environmental movement...It takes a movement to fight a movement" (Rowell 1996, 13). These groups persuaded labouring classes that they were "freedom fighters" whose property and job rights were being encroached by government, environmentalists, and international policies, who they charged were either "fanatics and ecoterrorists" or "elites" using "suspect science."

The development of social movement actors who were front groups for corporate actors undermined science-based knowledge related to the

environment, climate, and consumer safety. They created a demonization/victimization rhetoric to polarize and then direct the hatred and rage against the liberal elites rather than the neoliberals. Augmented by social media now, the misinformation and disinformation industry shapes daily discourse creating a deep wariness among citizens to engage in public discussion. One of the core challenges in climate communication is trying to reach across this polarized ideological and class divide to nurture once again the ground of solidarity.

Using a Gramscian understanding of crisis, Milan Babic (2020) argues, we can "'connect the dots' of crisis events and phases [at the global, state, and societal levels] into a consistent narrative" (775). A historical understanding and a sociological imagination can not only put the 20th and now 21st centuries into perspective but can revitalize much needed social solidarity. We need to understand these elements as indicative of a dying era, accelerated by neoliberal economics.

As Things Fall Apart: Sitting in the Crack

Many now believe that we are in the dying days of modernity (Akomolafe 2022; Andreotti 2021; Eisenstein 2013). Babic asserts that one of the most pertinent elements of Gramsci's theorizing now is the notion of the interregnum. Gramsci (1947) referred to an interregnum as the place between two eras where what exists is dying, with many morbid symptoms appearing, until the new form can be born (311).

Arguably, one key feature of the interregnum is where the governed become increasingly alienated from their economic and political leaders. We are witnessing the morbid symptoms as the increasing tendency toward authoritarian and fascist politics, a profound loss of democratic debate and deliberation, acceptance of extremism, hostility to internationalism, provoking of culture and race wars, and the rage and hatred industries leading to increasing violence and incivility in our communities. We are seeing it in a withdrawal from politics through cynicism and distrust of not only leaders, but of each other.

Agitating deep divisions, the rise of right-wing populist parties and post-truth politics deliberately challenges the pillars of the liberal international order by appeals to foundationalism (religious, ideological, or otherwise), withdrawal from international economic and political relations, and the "revival of national glory and strength" as seen in Trump in the USA, Erdoğan in Turkey, Orbán in Hungary, Bolsonaro in Brazil, and Putin in Russia, to name a few (Babic 2020,

778-780). While these impulses work against non-elite class self-interests with many "cultural and identity-related contradictions," the ideological narratives are sufficiently compelling that there is now a loss of legitimacy and a growing "sense of crisis of world order" (Babic 2020, 782). Babic predicts that this interregnum and its unmanageability may last for decades (774).

In the Global South, especially in megacities, not only are large numbers of population contingent labour but many of the unemployed are blatantly considered "surplus population" (Stuchul, Prakash & Esteva 2021). "Vast numbers of people now serve no use for capital. They are considered disposable. And today, the disposable are being disposed of - a new iteration of war [...] what the Zapatistas call the 'Fourth World War'" (2021, 416). Stuchul, Prakash and Esteva suggest that the pandemic has made the fragility of public policies, the invocations of science, and governmental controls to limit such things as pandemics and climate change even more unpalatable to many, who turn to polarizing leaders promising to upend the established liberal international order. Social cohesion can no longer be assumed, as the intersecting colonial, ecological, and social realities cause a further unravelling (Heinberg & Asher 2022). Extractive capitalism continues to lay waste to vast stretches of land and waters. Yet, historic injustices are still evident in "green colonialism" where "climate ambitions [are pursued] on the backs of the poorest people" despite that the Global North is responsible for 92% of carbon emissions (Walters 2022, 133). Daily, food and water insecurity, weather unpredictability, and rising sea levels threaten wellbeing. Stuchul et al (2021) assert that "to pretend to ignore the war is to perpetuate it" (p. 416).

We need to understand we are between stories (Eisenstein 2013). Just as Gramsci intimated, Bayo Akomolafe and Vanessa Andreotti describe that the material shape of what is emerging as a new era is not yet clear. The polycrisis is a wide-scale socio-cultural worldview problem requiring a reimagining of who humans are in relation to the living world, and what responsibilities humans have to this world and each other. While they provide practices for disrupting the old story of modernity, we also need to sit in the crack between epochs, in the tension of the not-yet, fully inhabiting this inbetween time.

As Akomolafe (n.d.) suggests, "times are urgent, let us slow down." This is hard work for a way of life predicated on endless speed, progress, and task-oriented hyperactivity. It calls us to a deeper humanity through a slowing down, a thoughtfulness and compassion, and an engagement with the living world. Andreotti (2021) calls it "hospicing modernity" where we act "with compassion to assist systems to die with grace, and to support people in the process of letting go—even when they are holding on for dear life to what is

already gone" (xxii). Modernity, she says, cannot teach us how to offer palliative care for its dying. Rather, we need to find ways to create and hold space "for difficult and painful things" especially all the myriad ways we are invested in modernity, including the assumptions of "separation and superiority" over the living world (xxiii). It is collective healing from modernity and in that, a pathway emerging. Pedagogical entry points and practices for composting modernity can be found in Lange, 2024b.

How Shall We Live? Storytelling into a Relational Pluriverse

We can only do something different if we are *becoming* something different. This involves a cosmo-onto-axi-epistemological transformation (Lange, Polanco O'Neil & Ross, 2021). Such a transformative process involves critique, chaos/emergence, and imaginal design. A profound process of social change is a wholistic, multi-faceted, integrative critique of modernity, attending to material interests, social relations, structures (ie. political economy and technology), individual consciousness (ie. attitudes, beliefs, values as well as embodied and perceptual capacities), and social consciousness (ie. shared symbols, collective identities, and social organizations). This critique can take the shape of narrative that connects the dots of modernity, as Babic described and as is demonstrated here.

Drawing from a systems theory of social change, Fritjof Capra (2024) suggests that it involves some level of chaos, which can lead to a total breakdown or a partial breakdown which can free up the energy for emergence, which occurs when a system emerges into a different level of self-organization. As Arturo Escobar (2017) describes, during this uncomfortable time, we need a "transition imagination." With a transition imagination, we can consciously free this energy, attune to a life-giving way of being, and thereby engage in an anticipatory designing of future civilizations, one footstep at a time, from the "many strands of tradition, culture, and history" (Ruether 2005).

Relationality: Old Stories and New Stories

Transitioning involves moving from old stories into new stories. In the old cosmological story, Newton and Galileo saw the universe as a large clock where all the planets, stars, and galaxies move mechanically while floating in black empty space. In the new cosmological story, the Hubble and James Webb telescopes see the dense and complex webs of energy pathways connecting all the stars and galaxies, now called the cosmic web. While materialist science gave us a mechanist understanding of time and space, a new view of *spacetime* fuses the three dimensions of space and time together without constancy and

uniformity. In this view of relativity, space is not fixed and time flows at different rates. Our observation is an act which itself changes what is observed. In this emerging view of wholeness, one particle cannot help us understand the whole. As Einstein explained, separation is an illusion of our current consciousness.

In the old ontological story, the fundamental reality was matter. In reductionist science, the smallest bits of matter were atoms, as the building blocks of the universe. Now, in the new quantum ontological story, subatomic physics understands that particles can show up as energy or matter or both. Reality is a highly sensitive web through which vibrations of energy are continuously pulsing and transmitting information. The concept of relationality is a revolution in seeing reality as a vast sea of energy where all things are connected. Assessing deterministic causal links is not possible given the constant fluctuation of subatomic particles and plasticity of time. We can only assess probabilities in any given moment. While the old story looked for parts and functions, the new story now looks for patterns and systems.

As part of this old ontological story, Earth is comprised of inert substances that are constantly malleable and available for human use as "resources." In the new story, however, the Earth has maintained the conditions for life through constant feedback loops, both positive (self-amplifying) or negative (self-correcting). The interconnections between the hydrosphere, atmosphere, geosphere, and biosphere are networked systems that are self-organizing and self-regulating to ensure optimal conditions for life to exist. Further, conventional science has studied living things by isolating them from influencing factors as well as seeing species as competitive, red in tooth and claw. In the new story, however, we see living systems as inherently networked, linked, and cooperative. Natural systems have a form of agency says physicist Karen Barad (2007), illustrating where it is healthy and where it is ill.

In the old story of individualism, humans are self contained in their bodies and minds. We are each pursuing our own good, our own freedoms, our own entitlements...responsible primarily to ourselves. In the new story, we are Nested-I's (Bollier & Helfrich 2019) or communal individuals (Gould 1978), who are profoundly related to all around us. Our body boundaries are perforated with the flow of mineral and chemical elements as well as energy. The living systems within our body are nested within a social system which is nested within the Earth system which is nested within a cosmos system. And like a spider's web, any movement is relayed immediately throughout the web, a form of energetic resonance.

In the old Western axiological story, there is one Truth and one way of finding truth and arriving at a moral determinations, formerly Christianity and later through science. It is clear now the diverse sciences and spiritualities that previously existed developed their own stories about the origin of the universe, the origin of humans, instructions for humans on how to live on Earth, and their own science by observing physical changes. These diverse stories are all part of the larger human story, one truth among many. As Indigenous people say, these are all simultaneously true. Further, they assert that learning modalities through story, music, poetry, and art are the oldest ways of learning and knowing.

In the old epistemological story, living beings are biological machines and nonhumans have no sentience or even feelings of pain. In this old story, only humans learn and are sentient, although behaviourism suggests limited learning via reward and punishment. In the new epistemological story, however, every cell in every living being uses perception and cognition to maintain a state of health. As Christian de Quincey (2005) says, consciousness goes all the way down. Thus, cognition IS the process of life. All of life learns as they live. Even living systems such as forests are cognitive systems, and they are responsive to changing conditions and actors. Therefore, human learning is learning responsiveness to the intelligibility of the world.

Further, all living beings are comprised of energy fields, including humans. Each of us generates a powerful electromagnetic field six to eight feet from our body with the heart as the most powerful centre of neural cells that receive and process information. Groups of beings have an energy field too, which can be coherent or out of synchronicity, whether a partnership of two people, a family, a community, workplace, or a classroom of learners.

In the old story of learning, there has been a spectator and accumulative understanding that was essential passive and consumptive. Yet, learning can focus on energy and movement and add far more perceptual pathways for learning, including the body, emotion, physical sensations, and intuition (Lange 2022). In process learning, learning is always moving and revealing, unfolding and enfolding. In teaching for emergence, learning over time leads to decision points in our learning regarding habitual or novel patterns. With enough perturbations, the increasing chaos can lead learners to a breakthrough into higher level of understanding and self-organization, called deep transformative learning (Lange, 2023).

Finally, the old story of education and learning has been predicated on the naturalism, universality, and superiority of the Western knowledge system. As in many other areas, education is still structured on an industrial model and Western hierarchies of value and importance. Education via schooling has been used globally for proselytizing, civilizing, industrial producing, modernizing, and globalizing (Lange 2024a). Property structures and the commodity form have deeply shaped school structures, including market logic considering education a commodity. Many Indigenous and Global South theorists assert that a new story must move past Euroamericancentric cognitive imperialism that discounts so many other ways of knowing and being (Battiste 2017; Odora Hoppers 2021).

Kinship: Wahkowtowin, Ubuntu, Interbeing...

The first word I was taught by my Cree Teachers was *Wahkohtowin* meaning "all my relations" or "we are all related" and "reciprocity with all life." Relationality is a global concept, reflected in parallel words such as: ubuntu, buen vivir, mitakuye oyas'in, kith and kin, interbeing, ayni, to name a few. A relational way of being, understood as kinship or where all living beings are our kin or part of our family, requires a deep process of re-remembering. Indigenous languages are verb languages – so kinship means the *act* of being in relation or active recognizing of the animacy of the world. Kinship does not mean means *having* relations, but rather that we *are* our relations. We are born into certain family and social relations as well as different biotic, cultural, and historical relations. We are inherently related as we grow in the womb and are birthed – we emerge with our own little body, touched gently by our parents and relatives, feeling the energy fields around us. The air and water of that place are ingested for the first time. We are embedded, not self-contained. As Barad says (2007), we are performed into being through these relations.

This entails an ethics of respect and reciprocity with all living beings and processes. We cannot manage the planet, but rather can learn to follow its lead. When we respect the living community, we are drawn towards it and study it with a "deep beholding" (Lange, 2023, 370). Learning the language and patterns of the Earth, ecological literacy, evokes human responsiveness rather than power and control. It can also assist us in redesigning human habitation and ways of being/knowing, entangled within the whole. As Indigenous people purport, Land is the Teacher. We unfold knowledge and meaning in dialogue with the natural world and other beings (Lange, 2023), rather than grasping and demanding that it unveil its secrets and show what is useful to us or what we can manipulate. We approach with delicacy, wishing "to be well in relation…restrained and nonviolating" (Lange, 2023, 370-371).

Regenerative Principles of Life

Deep sustainability means living into a different way of being and doing that can sustain Life indefinitely (Lange 2023). Regenerative cultures are those that "put life at the centre of every action and decision" (Hawken 2021, 9). Regenerative practices heal the severed relations between humans, communities and the living world. Relearning limits to human action and the principle of balance, particularly the balance of not overshooting ecological boundaries while providing a foundational floor of social goods for all, is captured in "Doughnut Economics" by economist Kate Raworth (2017). This delicate challenge of reframing limits and reclaiming the principle of balance has been the ongoing conundrum for creating sustainable societies.

Revitalizing the Commons and Conviviality

Contesting the monolithic concepts of modernity, the notion of pluriverse worldmaking is creating a world where many worlds fit, say the Zapatistas (in Lange, 2023). It is a reclaiming and revitalizing all the plural ways of being and doing, plural ways of being human embedded in an agentic living world and cosmos. It is rethinking cosmology, ontology, axiology, and epistemology, as described above, examining alternatives past and future. A *commons* is a life form, where peers are engaged in organic, self-organizing, bottom-up practices called "commoning" that offer wider freedom, are moderated by the concerns of fairness for others, and which respect all life forms. They have a self-healing quality when disruptions and conflict occur. Such micro-practices in our social life can develop new forms of power, and undertake social change in a relationality manner.

Bollier and Helfrich (2019) describe how "the commons" is being revitalized outside of property relations. Some of these alternatives are already occurring in "small, local, and sometimes forgotten places" (Lange 2023, 393; Esteva & Prakash 1998). Commoning is how a community learns to redesign itself on a daily basis, in three areas: provisioning, peer governance/democracy, and social life. This requires a composting of predatory competitive capitalism, aggression, and violence, and power-over in any form. It requires relearning the skills of conviviality, including the non-modern arts of living and dying. It is relearning balance between all cosmic principles, including the Feminine and Masculine principles.

Nurturing Networks of Learning Commons

Building from Illich (1970) and his notion of learning webs, learning commons occur outside of schooling wherever people have learning needs and gather to learn, enabling access to the learning that communities require. This acknowledges many different ways of knowing and forms of knowledge, where all are teachers and learners. A *learning commons* grows by links to many other small commoning groups around the world. As educators, we have established a learning commons in our small city, which is growing organically as people come forward to offer learning or who indicate their needs related to growing a regenerative way of living. It is re-envisioning what adult and lifelong learning, particularly popular education (Mayo, 2024), might look like in our context.

The learning, process learning, starts from our intentions toward our relations (Lange, Polanco O'Neil & Ross, 2021). It is a whole body, mind, spirit, and heart experience. It can foster alternative ideas about wellbeing that are not monetary, status, or power-oriented. A contextual approach is responsive to each community's history and character as well as the interests and values of different learning groups. It is also land-based education in learning *about*, *in*, *for*, and *as* the particular ecosystem in which the learning takes place, as a form of ecoliteracy (Lange et al, 2021).

Our Great Work and Adult Education Futures

"Like the [poly]crisis, the transition we face goes all the way to the bottom. Internally, it is nothing less than a transformation in the experience of being alive. Externally, it is nothing less than a transformation of humanity's role on planet Earth" (Eisenstein 2013, 6).

Our Great Work, as Thomas Berry defines it, is connecting our education work to the story of the cosmos, the history and dynamics of the Earth, and the fate of all species including the human species. We can be midwives for the needed transformation through a transition imagination, toward a more relational and life-giving way of being. It is fair to say that the field of adult and lifelong learning (ALE) remains largely anthropocentric and has suffered from a failure of imagination beyond what is, given its professionalization and institutionalization. Once again, inhabiting the margins outside of institutionalized education is one open space for taking up the education work needed in this moment.

In a recapitulation of what is required of adult educators in this moment is: teaching to live within the planetary boundaries, re-inserting ourselves into the web of life, re-fashioning human habitation by mimicking the principles of life, composting the problematic ideas of modernity and all the manifestations of separation and mechanism, telling the new stories of relationality, teaching for kinship as a rehonouring of Indigenous ways of knowing, teaching the skills of commoning, establishing a network of learning commons each in our own context, enacting process learning, and teaching for emergence of a new era. It is a stretching of our cosmo-onto-axi-epistemologies perceptions toward post-anthropocentric, post-patriarchal, post-Newtonian, post-Cartesian, and posthumanist thinking and being. All together this anticipates a pluriverse of ways where people in every place relearn how to live well in their own place, respecting a tapestry of ways of being human and being wise, while responsive to the living world.

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The Polycrisis and Adult Education Futures: The Transformative Work of Relationality

Elisabeth Lange

Abstract

We currently face a polycrisis, as a single macro-crisis of runaway failures related to the Earth's natural as well as social systems, which imperil humanity's prospects. In considering what might be required of adult educators in this historical moment, the climate crisis is described within the context of the revolt of the elites ushering in the neoliberal era. The logical consequences are a crisis of our civilizational form — the modern colonial capitalist patriarchal form. Drawing from Gramsci, we have entered an interregnum between two eras, where what exists is dying with many morbid symptoms. As we stand between these old and newly emerging stories, adult educators can take up their Great Work by composting modernity while using a transition imagination in teaching for relationality, kinship, regenerative lifeways, and commoning, establishing a global network of learning commons to meet local contextual needs, revitalizing a pluriverse of ways of knowing and being.

Keywords

polycrisis, interregnum, relationality, pluriverse, climate crisis, transition imagination, adult education futures

La policrisis y el futuro de la educación de adultos: El trabajo transformador de la relacionalidad

Elisabeth Lange

Resumen

Actualmente nos enfrentamos a una policrisis, como una única macrocrisis de fallos galopantes relacionados con los sistemas naturales y sociales de la Tierra, que ponen en peligro las perspectivas de la humanidad. Al considerar lo que podría exigirse a los educadores de adultos en este momento histórico, la crisis climática se describe en el contexto de la revuelta de las élites que da paso a la era neoliberal. Las consecuencias lógicas son una crisis de nuestra forma de civilización: la forma patriarcal capitalista colonial moderna. Inspirándonos en Gramsci, hemos entrado en un interregno entre dos épocas, donde lo que existe se está muriendo con muchos síntomas mórbidos. A medida que nos situamos entre estas viejas y nuevas historias emergentes, los educadores de adultos pueden asumir su Gran Trabajo haciendo abono de la modernidad al tiempo que utilizan una imaginación de transición en la enseñanza para la relacionalidad, el parentesco, las formas de vida regenerativas y la puesta en común,

estableciendo una red global de aprendizaje en común para satisfacer las necesidades contextuales locales, revitalizando una pluriversidad de formas de conocer y ser.

Palabras clave

policrisis, interregno, relacionalidad, pluriverso, crisis climática, imaginación de transición, futuros de la educación de adultos.

La polycrise et l'avenir de l'éducation des adultes : Le travail de transformation de la relationnalité

Elisabeth Lange

Résumé

Nous sommes actuellement confrontés à une polycrise, c'est-à-dire à une macro-crise unique d'échecs incontrôlés liés aux systèmes naturels et sociaux de la Terre, qui mettent en péril les perspectives de l'humanité. En examinant ce que l'on pourrait exiger des éducateurs d'adultes en ce moment historique, la crise climatique est décrite dans le contexte de la révolte des élites qui inaugure l'ère néolibérale. Les conséquences logiques sont une crise de notre forme de civilisation - la forme patriarcale capitaliste coloniale moderne. En s'inspirant de Gramsci, nous sommes entrés dans un interrègne entre deux époques, où ce qui existe est en train de mourir avec de nombreux symptômes morbides. Alors que nous nous trouvons entre ces histoires anciennes et les nouvelles histoires émergentes, les éducateurs d'adultes peuvent reprendre leur grand travail en compostant la modernité tout en utilisant unimagination de transition dans l'enseignement pour la relation, la parenté, les modes de vie régénératifs et la mise en commun, en établissant un réseau mondial de biens communs d'apprentissage pour répondre aux besoins contextuels locaux, en revitalisant une pluralité de façons de savoir et d'être.

Mots clés

polycrise, interrègne, relationnalité, plurivers, crise climatique, imagination de transition, avenir de l'éducation des adultes