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Red Biocentrism for the Anthropocene

If the dawn of the Anthropocene heralds the collapse of the natural and social sciences into a single geostory, then why not also a radical synthesis of the anthropocentrism of Marxist theorising with the biocentrism of Deep Ecology? This article proposes just such a unification for theorising education. Firstly, those on the educational left who wish to develop a fundamental unity between red and green should perhaps unearth the roots of Deep Ecological thinking and delve into the long and manifold history of socialist movements with the aim of identifying where, between the deep red and deep green, might lie some shared origins in common ground. The flawed but nevertheless distinctive monism of the first philosopher of Marxism, Joseph Dietzgen offers a philosophy which both prefigures the cosmology of Deep Ecology and suggests means of reconciling the narrative of human toil and 'progress' with that of human 'nestedness'. The task facing the socialist looking to explore such a possibility needs to be located principally at the level of 'cosmic', rather than 'social' ontology, and this article sketches the outlines of such a unity project. Secondly, from this synthesis flows a set of implications for education and human growth. As the article explains, themes such as alienation and subjectification which cross-pollinate the theoretical perspectives might serve as central motifs in a red biocentric educational project fit for the Anthropocene. It is not solely environmental education, but approaches to education more broadly that require reconceptualisation for the Anthropocene.

Introduction

A spectre still haunts Europe. Indeed, it haunts the whole world. And the spectre is *still* communism: the ghost of a world held in common, land unowned, a usufruct over all the earth. Marco Armiero and Massimo De Angelis (2017) are right in marking the moment of the triumphal return of the grand narrative: not that of the coming of communism, but the Big Story of the Anthropocene, its claims to the immutable truth of a new chapter opening in the book of the Earth appearing to occlude the possibility of any counter-(grand)narrative, such as Marxist historical materialism, Hegelian "speculative modernity" (Lyotard, in Browning, 2003, p.224), or even teleonomy. The Anthropocene, so the story goes, is a matter of hard stratigraphic fact: the first letter of the first word of the first page of this chapter is now being written. When the Earth reaches this chapter's conclusion, its plot, we are told, will reveal the significance of that first word. We humans may or may not be there to review how it has all panned out (our presence in the story may be limited to the early paragraphs), but Gaia will nod sagely as she closes the Anthropocene chapter, confident in the knowledge that the darkness of Anthropos' long night of dying fell upon the earth precisely in the moment that the chapter opened.

So, like Hamilton, Bonneuil and Gemenne (2015), let us take very seriously the claim that the Anthropocene represents not just a challenge to Holocene metanarratives, but to the idea that competing accounts might coexist in natural sciences on one hand and social sciences on the other *at all*. Let us also face the reality that *Holocene Marxism is dead*; but the continuity of the communist necessity requires a rethinking of Marxist orientation. No, more than that, it requires an explosion in Marxism's inclusivity. The Holocene may have been so named because it was wholly or entirely recent, but the irony is that whilst the Marxism of the Holocene was (almost)

wholly anthropocentric – Anthropomarxism – the Marxism of the Anthropocene must be entirely holistic – Holomarxism.

What does it mean to say that “humans have become a telluric force, changing the functioning of the Earth as much as volcanism, tectonics, the cyclic fluctuations of solar activity or changes in the Earth's orbital movements around the Sun”? (Hamilton, Bonneuil and Gemenne, 2016, p.3) This is to claim that where the impacts of material movements in our corner of the solar system are registered by whole earth systems as significant enough to be the “difference which makes a difference” (Bateson, 1999, p. 259), these derive from activity some of which might be defined as anthropogenic, some as volcanogenic but all of which counts equally as movement within a single system, a single material ecology. Those features of human activity we package up as politics, economy, culture, no longer function in an order different to or separate from thermohaline circulation or plate tectonics. Material movements are only that: there are no parallel ‘planes’ of activity. The time of binaries is over: dualism has had its short-lived day. A dialectics of ‘man’-*and*-nature’ is left behind in the previous chapter along with Holocene fantasies of spirit *and* matter, phenomena *and* noumena. Put differently, “the conception of the natural world on which sociology, political science, history, law, economics and philosophy have rested for two centuries - that of an inert standing reserve of resources, an unresponsive external backdrop to the drama of human affairs is increasingly difficult to defend.” (Hamilton, Bonneuil and Gemenne, 2015, p.5)

The approach introduced here is Red Biocentrism. Red Biocentrism is the collapse of Holomarxism and Deep Ecology into each other's spiraling orbit. And this article can only be a sketch of the Red Biocentric project in relation to philosophy and/of education.

Historical (Holocene) context

It would be a pretense to claim that the essence of the argument I intend to make in this article is wholly new. Red Biocentrism has long lurked *in potentiâ* behind the claims of Marxist heretics and misfits. If one were to delve into the annals of the early days of the socialist movement, after a little searching, one might discover the lost world of the poet visionaries and dreamers of early Bolshevism, giants in their own ways, but sadly so little regarded among serious green socialists now – Bogdanov, Gorky, Lunacharsky – figures whose names could be on the lips of those seeking to find educational solutions now, in the ‘collapsing times’: Bogdanov for his vision to create a science of all things, a meta-theoretical approach intended to enable precisely the re-coupling of the natural and human sciences that so many of us struggling with the meaning of the Anthropocene seek; Gorky for his imagining of the transformative capacity of a surrender to the collective; Lunacharsky both for his marriage of Marxism and religious sentiment, but also for his application of those ideas of proletarian cultural evolution to the field of education, as the first Soviet Commissar of Education, no less. And behind them all lies the even mistier figure of Joseph Dietzgen (1906a, 1906b).

To set the theoretical context for the call for Red Biocentrism, allow me first to illustrate the potentialities immanent at the moment of post-revolutionary confusion in the decade following the 1905 revolution in Russia. Why might this be of any interest whatsoever? During this period, the intellectual and moral leadership of the Russian Marxists was contested, and with it the direction social democrats should take in advancing the revolution. Perhaps the ideas born of and grown in this ferment could not outlast it; certainly they could not have emerged except in response to the set of material conditions and a balance of forces which it offered. Or perhaps the unique context offers a lens through which we might recognise something of the meaning of the

Anthropocene, of our own restlessness, distrust of leaders, sense of impending transition, rootlessness. For, we bear witness here not only to a moment of political transition after 1905, but also to a new scientific context – a recognition of the importance of energetics and natural limits, an emerging awareness of the new physics; and, of course a keening sense of the disorientating disequilibrium occasioned by the ongoing brutal and uneven advance of capital across the landscape. Add to this a deeply superstitious and fatalist peasantry and a rapidly growing proletariat receptive to and productive of novel and revolutionary ideas and we have a cauldron of contradictions. From this context, it is argued, we might learn something of the organic synthesis of the religious and scientific, the political and the cosmological, the *ἀνθρωπος* and the *θεός*. The historical overview offered here attempts to relocate the precursors of the Red Biocentric synthesis within a set of material practices and ideas which are both particular to the moment and offer a glimpse of the project of epistemological and pedagogical reconstruction possible, and necessary among the contradictions of the current period of environmental crisis.

What is fascinating and important for those of us on the left, from the perspective of the early Anthropocene, is that the grand project of rethinking the conceptual basis of our epistemic disciplines is not new to our traditions at all, and lurks in the darker corners of wild experimentation before the coming of Marxism-Leninism. For Ted Benton, Bogdanov's proposal for a universal organisational theory represented a "new proletarian science" of the sort anticipated by Dietzgen, which "was a precursor to, and possibly even a superior version of, the systems theory of Ludwig von Bertalanffy." (Benton, 1996, p.116). Bogdanov's all-encompassing attempt to offer a set of general methods of explanation of the interrelations between every element of the universe allows the retrospective reader to attempt a more or less direct line from Bogdanov through systems thinking into the Anthropocene expansion. In addition, for Benton, "[b]y conceiving humans as part of and within nature, as existing only through their capacity to obtain and process usable energy, Bogdanov [for the first time] brought the limitations of the natural environment into sharp focus." (Benton, 1996, p.116)

Bogdanov's theory has been characterized as representing a supersession of Marx and Mach (Jensen, 1978), but commentators have tended to neglect the influence of Dietzgen. Under the influence of Dietzgen (and Mach¹), the pedagogical aspect of social transformation came to the fore within the thought and writing of Bogdanov and the other *vperedists*. In proposing workers' self-organisation into a "General Workers' Soviet", Alexandr Bogdanov recognised the need for proletarian self-education: for this to operate, he, like Sorel (1999), saw the need for a working class *mythology* to inspire a reorientation within the world². Such a project is of special interest

¹ What Ernst Mach, leading experimental physicist and foremost philosopher of science of the Austro-Hungarian Empire, brought to the table was contentious to say the least. Here is not the place to discuss Mach; let it suffice to say that his dogged empiricism and equally vociferous relativism lent him, for his Russian revolutionary followers, the caché of cutting edge science. Along with Dietzgen, he also provided an empiricist basis for their forays into the realm of philosophy and psychology. An important aspect of the so-called Machists' 'Empiriomonism' was the emphasis on thought as action, and here Dietzgen's influence was also clear.

² It should not be surprising that Bogdanov's sense of the centrality of labour in defining the dialectics of 'nature' marks his theory as anthropocentric. This makes it perhaps all the more notable that his predecessor Dietzgen's (1906a) conception of thought as matter retains a dogmatic holism, a vision which his supporters understood as demanding a 'world consciousness'. In this respect, Dietzgen's vision is truer to the nature-monist aspirations of Red Biocentrism than were the intermediate phases of Bogdanovite systems thinking. The cosmology after which Bogdanov strove was certainly worked through in far more detail in his so called 'proletarian science' of Tektology than Dietzgen ever achieved, but many of its features are already present in Dietzgen's monistic sketches. Politically, it was Dietzgen's cosmology or cosmopolitics which informed too those whose attempts at drawing together Marxist and anarcho-syndicalist strands were most effective, such as Pannekoek (2003) and Gorter (1989). Contemporaneous with Bogdanov's innovations, this confluence of the cosmological and the political in Dietzgen's legacy led to profound clashes within communism both in Russia and Europe. The key to his influence on both the Dutch left Marxists – Pannekoek and Gorter – and the 'Machists' was the importance that accrues to a transformation in the cultural imaginary; Dietzgen's vision of the 'religion' of communism (or of 'social democracy', in Dietzgen's terms), which demands a cosmological reorientation. This 'god-building' exercise would, in Bogdanov's eyes require the proletariat to "transcend bourgeois culture, which he argued could only be achieved by creating a new culture to organize experience." (Benton, 1996, p.115) Ted Benton notes that in this respect, Bogdanov anticipates Western Marxist critiques of bourgeois science, but insofar as

today in collapsing times. For, along with autodidacticism goes a cosmology or worldview which identifies collective action of the extended proletariat (see below) as a manifestation of contradictions in the material conditions of production, within which they find themselves, but which does not require the necessary intervention of a party from the outside; such a dualism being seen as representative of a mind-body split, or of a theoretical-practical divide. Here, Joseph Dietzgen's legacy goes far deeper than some recognise. For it is only on the understanding of the universe as single and unbroken that it is possible to conceive of a dialectics without mind-body or party-people dualisms³ (Boxley, 2019). This theme is one common within recent debates among feminist and ecological thinkers wrestling with the implications of environmental crises for cosmology and ontology, coming from perspectives which draw together the concerns of feminism and ecosophy (Naess, 1995, 2008; Mathews, 2003, 2005; Skott-Myhre, 2018)

It has often (Goodison, 1992; Peat, 1987; Žižek, 2010) been said that the Left has failed to reach those affective yearnings and affiliations which would really equip us to tackle the challenges of the Anthropocene. If the Left reaches only the right brain, then its neglect is not of sentiment, but rather it fails Dietzgen's earlier challenges, and divides the rational from the emotional, the political from the 'religious' in such a way that it lacks the vocabulary to approach desire, the sensual and spiritual. Bogdanov and Lunacharsky saw this⁴, and we would do well to learn from them some important lessons: *hold on to the long view; evolve the symbols, the mythology that supports a collectivist, monistic worldview; find new ways to feed desire without the need for endless growth.*

this meant that "he saw the mechanical view of the world, the split between mind and matter, idealism and materialism, as expressions of the social practices of capitalist society" (ibid.). Bogdanov clearly also follows in these footsteps of Dietzgen's.

³ Yet Bogdanov diverged somewhat from Dietzgen on this point. According to Benton, "Bogdanov regarded Dietzgen's philosophy as still too much based on contemplation, defending Marx's (and modern physicists') concept of matter as that which resists labor (or action) against Dietzgen's conception of matter as primary being." (Benton, 1996, p.115) On this reading, in contrast with Dietzgen, Bogdanov's counter-posing of matter against labour means that the absolute indivisibility of matter is broken, with labour standing in as the motive force of the universe, the active sphere as against matter's passivity. However, Benton's interpretation may not fully take into account Bogdanov's appropriation of energetics as a force which works across these spheres.

⁴ Bogdanov and his co-thinkers' marriage of a pedagogy of 'spiritual' transformation with the cosmopolitics of monism represented the cornerstone of both Dietzgenite myth-building and the ecosophical and panpsychist reimagining of society. The possibility of this transformation is to be found in the worldview which Bogdanov begins to map, a cosmology which represents the early phase in what becomes known as Systems Theory. Belykh (1990) claims that Alexandr Bogdanov's Tektology "is rightly considered to be the forerunner of... general systems theory" (Belykh, 1990, p.571). Whilst systems thinking in general goes far wider than biological or 'natural' relations, (Susiluoto, 1982, p.17) it is that strain of biological philosophy as exemplified by Ludwig von Bertalanffy that most informed ecological thinking in the twentieth-century. Susiluoto usefully unravels the intimate relationships between pre-Soviet and early Soviet thought and later systems theory. Unsurprisingly, von Bertalanffy himself acknowledged among the historical predecessors of systems theory, both Hegel and Marx (leaving the way open for a Marxist reading of the origins of systems thinking). Whilst it was Felix Auerbach who in 1910 applied the rules of thermodynamics to biology to propose the idea of living systems resisting disorder, a central theme in ecological theories and a necessary and acknowledged influence upon von Bertalanffy, also of great importance in this respect, the Russian V.I. Vernadsky's (1998) analysis of the biosphere "led to a comprehensive approach which in a way became the basis for today's ecosystem concept." (Susiluoto, 1982, p.26). However, most importantly, "[t]he task of taking thought processes originating in different quarters and combining them into a single movement was ... Aleksandr Bogdanov" (ibid., p.27). There may be no direct lines which lead from Bogdanov to Ludwig von Bertalanffy; nevertheless, one indirect connection was Moritz Schlick, a supporter of Bogdanov's positive stance on Einstein's theory of relativity, who went on to teach von Bertalanffy. A crucial aspect of the understanding of 'biological relations' which underpins Bogdanov's development of a systems thinking approach was the spread of evolutionism and his development of these ideas within his material political context. Bogdanov linked the study of societies with the Darwinist perspective. In nature, the development of animal species was regulated by a struggle for survival. In society, struggle and adaptation reached its highest level, as it were, in the collective. The evolution of knowledge became the motive power of development. According to Bogdanov, society's ability to adapt to nature depended in its ability to obtain, process and generalise information. It can only be in the lived experience of collectivity that the kinds of knowledge can arise which would allow humans successfully to adapt to nature. In this sense, only proletarian science and proletarian culture really allow for such a possibility. Something very close to such a position was already present in the writings of Dietzgen, for example in his 1887 'Excursions of a Socialist into the Domain of Epistemology' nearly twenty years before Bogdanov began to develop them: in contrast with the emerging socialist science, bourgeois "science is narrow and wanting in penetration, it still lacks a systematic theory of the Universe as an infinite monistic evolutionary process." (Dietzgen, 1906b, p.299) By 1913, Bogdanov had come to foresee the day when the socialist transformation of society would yield new forms of thinking and, ultimately the new science, then envisaged as an outgrowth of his own Empiriomonism. In *The Philosophy of Living Experience*, he writes, "Philosophy is living out its last days. Empiriomonism is already not fully philosophy, but a transitional form, because it knows where it is going and to what it will have to give place. The beginnings of the new universal science come in the next few years. Its flowering will arise from the gigantic, feverish organizational work which will create a new society and complete the agonising prologue of the history of mankind. That time is not far off..." (Bogdanov in Susiluoto, 1982, p.45)

Why Red Biocentrism?

Some readers may detect a familiarity in the term Red Biocentrism, born of reading the writings of David Orton (1998, 2000). I admire this work, and wish to build on it. However, Left Biocentrism exists as a species of Deep Ecology, drawing on its eight point platform whilst also identifying with anti-authoritarian lefts, both anarchist and socialist traditions. But it is not communist.

On the one hand Red Biocentrism seeks a truly communist mode of expression suitable to the Anthropocene. Unlike left Biocentrism, it is a species of Marxism, as much as Dietzgen's formative cosmic socialism, Bogdanov's empiriomonism or indeed Merrifield's magical Marxism. It is communist, but the common in its communism is interspecific. That said, Red Biocentrism shares a great deal with Left Biocentrism. We take our list from Curry's (2011) analysis of Left Biocentrism. Firstly, "concerns with class, gender and race, while urgent... are viewed in the context of ecological justice." (Curry, 2011, p.117) This is nearly right: *class, gender and racial injustices are also necessarily ecological injustices*. Secondly, our goal is "solidarity with all life, not just human life" (Orton, in Curry, 2011, p.115). This is entirely in accord with Red Biocentrism. Thirdly, nature is "a true commons - even, as such, sacred - and therefore 'not to be privatised'". (Curry, 2011, p.115) Yes, of course! Dietzgen (1906b) said as much in the 1880s (Boxley, 2019). We go further and recall, after Michael Hardt (2010, p.136) that the distinction between a 'natural' and an 'artificial' commons quickly breaks down especially under Anthropocene conditions. The common products of human creativity - language, ideas, an education - constitute but a part of the material commons of nature. Red Biocentrism rejects the myth of private property in its 'natural' or 'artificial' emanations.

On the other hand, whilst the Marxism of the Holocene was anthropocentric, simply asserting Biocentrism, left or otherwise, won't do. A Biocentrism of the New Age too easily falls prey to temptations of consumerism, competition, hierarchy⁵. Whilst in its origins in the 1960's and 70's New Agers may have celebrated sufficiency with axe in hand, the festival of healing methods, spiritual paths, self-help and reawakening packages which followed became nothing less than a carnival of profiteering (Goodison, 1992, p. 240; Greer, 2012, p.105).

Why, then, Red Biocentrism?

1. *Because of our historical moment.* The first, most prosaic answer to the question, 'why Red Biocentrism?' is because there is no going back. If Dryzek and Pickering (2019) are correct, planetary boundary conditions cannot any longer be regarded as those that pertained under now unobtainable Holocene conditions (Dryzek & Pickering, 2019, p.9). At issue here whether an ontological Rubicon has been crossed, or whether by contrast, we might indeed go on thinking about a return to the status quo ante. There can be little doubt that, even were we to find impossibly neat technological solutions to our energetic throughput, which included currently unimaginable levels of carbon sequestration, it would still take

⁵ It is for this reason that Greer (2012), like Merrifield (2011) and Scott-Myrhe (2018) all in their various ways hold on to the idea of magic as that which evades the commodity form. It cannot be served up with an exchange value. Perhaps though, this is wishful thinking the very immateriality associated with the word does not sit well with those of us who advocate holism, monism, even the transpersonal and panpsychist. Our earlier 'cosmic socialists' would no doubt have learnt from those informed by quantum physics, the Kapras and Bohms, just as they did from Mach, would have had little time for 'magic' but plenty of symbol and myth building.

many thousands of years to return to the Holocene conditions that we left behind so recently. On a day like today, as I write this article, on what our news broadcasters in the UK are proclaiming the warmest winter day ever recorded (Shukman, 2019), one can almost smell the smoke from burning bridges. Yet, it behooves us well to retain the long view. Thinking again of Alexandr Bogdanov, in 1919 the revolutionary published his *Course in Political Economy* which imagined a utopian social order organised on the principles of his universal science, Tektology⁶ (Bogdanov, 1996). Most interesting from the point of view of Anthropocene theory is the role Bogdanov assigns to capitalism in this text. The domination of capital represented a period of profound instability between far more stable and organised epochs. From the perspective of Russia, with capitalism a relatively recent, shallow and incomplete mode of production, Bogdanov saw this phenomenon as brief and transitory, covering “a period which is very important from the point of view of the individual but insignificant when examined from the perspective of mankind.” (Bogdanov, in Susiluoto, pp.58) It was preceded by *primitive collectivism* with its relatively resilient and sustainable character, and will be succeeded by *advanced collectivism* in a state of equilibrium.⁷ The Anthropocene ‘moment’ has begun, one of great significance for those who live through it, but one which may prove ephemeral – like Bogdanov’s view of capitalism, a period of great temporary instability between relatively steady states. We might even say that the phase of capitalist production and the Anthropocene are not separable phenomena, but represent different names for the same material, reality. In this respect Dryzek and Pickering are quite wrong to glibly dismiss the important work of Jason Moore (2015, 2016). To claim that the epochal shift ties itself too closely to the gadfly phenomenon of the capital system entirely misses the point⁸ – that whilst it may be ephemeral in geological terms, it is precisely the set of material conditions which have coalesced within the capital system which have taken us to this place. These are just the psychological, institutional, systemic, political, economic and cosmological conditions which Dryzek and Pickering require rethinking: to claim that the mode of production is secondary to these is to run scared of the beast that can’t be confronted, the domination of capital itself.

2. *Because the distinction Anthropos and the Bios can no longer be sustained.* Much has been written about this (Bonneuil & Fressoz, 2016; Hamilton, Bonneuil & Gemenne, 2016; Moore, 2016) – I do not intend to revisit here a theme which must surely feature in most discussions of Anthropocene ontology.
3. *Because recognizing ourselves as a species means becoming a species among species.* The Anthropocene meaning of Marx’s *species being* has been recognized (Žižek, 2010) to require a material reimagining of humanity, not only in itself but now also *for itself*. As Marx saw, in 1849, the conditions of capitalism carve out new abstractions, as materially real as the nexus of impacts they affect upon the world about them; “[t]he domination of

⁶ Even then, two years after the revolution had begun, he did not describe this systematically organised social system as socialist or communist, but as collectivist (Susiluoto, 1982, p.58)

⁷ Bogdanov takes the long view of evolutionary time – *sub specie aeternitatis* as Dietzgen said of Spinoza – and finds in the primitive collectivist systems pointers towards the sustainable society to come, a ‘steady-state’ world of internally coherent elements. Bogdanov’s approach was that of a natural scientist rather than that of a politician: although he saw capitalism as a ‘brief’ transitional phase, he did not foresee its immediate decline, even among the turmoil of 1919 in Russia. Indeed, because he felt that in order for a new social system to emerge and sustain, what was required was a new worldview, a socialist outlook on the cosmos, “[h]e had his sights set centuries ahead. He could not, therefore, provide exact advice on how a new society should be built. The ideal should be implemented through a prolonged period of learning, in the process of which the collective experience would raise the awareness of the people to a new level.” (Susiluoto, 1982, p.59) In contrast with later Marxist orthodoxy, Bogdanov like his Dutch contemporary and keen ‘Dietzgenite’ Anton Pannekoek takes as a central lesson from Dietzgen the importance of the transformation of consciousness in any successful revolutionary process.

⁸ It is rather like the comic absurdity of assigning a single date, year or decade or month, to the start of the geological age, as if we could have expected the Bardi and Peruzzi to have declared, “That’s it, it’s begun, capitalism is with us”.

capital has created for this mass of people a common situation with common interests” (Marx, 1995, p.189), from which it is but a short yet existentially revolutionary step to not only our class but our very species uniting as it is constituted “for itself,” recognizing in the political struggle to rewrite the Anthropocene, the new species-consciousness of our telluric identity. But this is not enough...

4. *Because the communism of Anthropomaxism could not accommodate the wider community.* An Earth-centred Marxism adequate for the Anthropocene requires further extension of proletarianisation (Žižek, 2010) through identification (Naess, 1988) to solidarity with the wider collective (Gorky, 1910)⁹ – pan-speciesist proletarianisation¹⁰. Joanna Macy and John Seed famously coined the phrase the *Council of All Beings* (Fleming and Macy, 1988) for ritual ‘Deep Ecology Work’ “to heal our separation from the world, or to know our interexistence with all beings” (Macy & Brown, 1998, p.150). The expansion of an extended ecological Self beyond class identification to such interspecies solidarity is a necessary and essential feature of Red Biocentrism: in the insurrectionary spirit of radical Self-realisation, let us rename its nexus the *Soviet of All Beings*.
5. *Because all species must be included in a new compact with the earth.* Holomaxism cannot rely any longer on the acquiescence of nonhuman life to the revolutionary project. Insofar as untold ecological damage has been wrought in the name of the revolutionary dictatorship of the proletariat, the opportunity for an anthropo-exclusive soviet (along with anthropo-exclusive councilism¹¹), though invaluable a century ago, is over: the *Soviet of All Beings* must be consulted, and means constructed by which nonhuman species’ ‘voice’ can be heard in the determination of policy.

⁹ Although Naess is certainly sympathetic to the kind of ‘mystical union’ with one’s ‘wider self’ propounded by certain religious traditions, he does not regard a mystical or meditational state to be a necessary condition for such union, indeed he wishes to avoid such terminology altogether. This is not only because of its association with obscurantism and vagueness but also for substantive philosophical reasons. Romantics, like mystics, often posed ‘cosmic union’ as a total state, a dissolution of the self into the wider cosmic whole. This is unhelpful from an ecological standpoint, because ecological systems require selves to operate at multiple levels simultaneously. They are *bio-diverse*, having many distinct but highly interrelated elements and, if they are to be viable, require such diversity to be sustained, and internal relations to be intensified, thus “Self-realization in its absolute maximum is, as I see it, the mature experience of oneness in diversity” (Naess, 1988, p.261). In *A Confession*, Gorky (1910) contrasts proletarian collective consciousness with mystical union: in the latter, the protagonist Matve opines, “my mind was enraptured when I disappeared, as it were, from consciousness of self, and ceased to be” (Gorky, 1910, pp. 277-8), whilst, as in ecosophical theory, “in this communion with men [the proletariat], I did not abandon myself, but on the contrary grew and raised myself above myself” (Gorky, 1910, pp. 278) This is an “oblivion of the self” (Gorky, 1910, pp. 278) of a sort, but one which only extinguishes isolation, not identity as part of a greater collective. Human subjectivities, associated with individual brains, necessarily retain a sense of corporeal selfhood as a transmitter of both DNA and ecological wisdom and competence whilst also recognising themselves as, often, part of actually existing wider selves, collectivities, networks, ecological and land communities – something of a conscious enactment of brain-in-body-in-ecosphere. Whilst the scope of the self fluctuates, Naess recognises that it is hard to maintain its maximal reach for very long whilst functioning within biological life; the transcendent state of the mystic or ascetic, for example needs operational support to avoid tipping over into self-extinguishing excess. Bluntly, the expansiveness of subjective excess has no adaptive-ecological advantage. Thus the awareness of levels must be maintained. When Naess (1988, pp.261-2) tries to find other terms which will help to explain the process of identification of self at different levels, he alights initially upon ‘solidarity’ (in German ‘solidarisch’ and corresponding terms in Scandinavian languages such as his own Norwegian), but argues that solidarity presupposes identification. Solidarity might be thought of as a kind of praxis, in part a psychological phenomenon arising from active participation in common endeavour, something rather like the experience of abstract labour. *Identification* on the other hand has ontological import; as read monistically, it represents Naess’ way of describing the more fundamental set of relations which define the dynamic parameters of abstracted unities at various levels within the single material plenum. Within socialist traditions, solidarity has, of course, been more usually associated with class consciousness and internationalism. This tradition is not at odds with Naess’ proposition. Deep greens might balk at talk of class consciousness, but the reality remains that under the capitalist mode of production, classes are significant ontologically. Shared participation within waged labour shapes the reality of the connections between workers, and between workers and employers. Needless to say, within developed nations, the agrarian peasant economy to which some deep greens look has long gone, and the primitive communism of tribal societies isn’t even an ancestral memory. So, where actions in solidarity with others occur, they are likely to be expressions of more or less inchoate class consciousness. Moreover, where actions in solidarity with particular nonhuman animal species occur, these too are likely to be expressions of a set of industrialised relations as exemplified by those with veal calves, live-export lambs, or laboratory rabbits. *The point is that solidarity itself depends upon forms of identification which are themselves shaped by material conditions and very real flows of energy, labour and capital.*

¹⁰ I do not intend to take time here to discuss the claims of the many ecosocialists and ecomaxists who have either identified a green turn in Marxist thinking, or identified in Marx’s own formulations a discourse of metabolism with nature. I am with Moore (2015) on this, insofar as a metabolism still requires boundary across which energy-flows pass.

¹¹ Pannekoek (1906, 2003) and others in the Council-Communist trend (ICC, 2001, p.70-71) saw Dietzgen’s work as a bulwark against the fatalistic and mechanical vision of historical materialism that underestimated the role of consciousness in class struggle.

6. *Because capitalism, liberal and neoliberal, is driving the great acceleration and cannot persist into the new age.* Liberal and social democracies only did better at responding to environmental pressures when, as Lord Stern so comprehensively pointed out, they started to do irredeemable damage to economic growth and its long term prospect, not because they had conceded to pressure from environmental campaigners, as they claim (Dryzek and Pickering, 2019 p.25). This was a case of interest convergence, but one which cannot hold in the face of the global juggernaut of capital.

What is Red Biocentrism?

Full definitions fall beyond the scope of this article. However, before moving to consider a Red Biocentric educational project fit for the Anthropocene, let us identify a couple of points which provide a 'primer' (in the spirit of earlier examples of such formulations for Deep Ecology (Naess, 1973) and Left Biocentrism (Orton, 1998)). What is Red Biocentrism?

1. *Red Biocentrism is dark Marxism; dark, green Marxism.* Red Biocentrism posits itself from within the traditions of Marxism, whilst seeking to radically extend the scope of revolutionary agency beyond wage-workers, beyond even Mariarosa Dalla Costa's (2019) universal female reproductive labour¹², into the reproductive capacities of all those species that provide the human life support and whose exploitation feed the accumulation of surplus value for capital. For Rikowski (2018) as for Merrifield (2011), to invoke a 'dark' magical Marxism is to call upon a primitive spirit of spontaneous energy which resides in the darkness, in the communism that already exists here and now. Derek Ford is right that the dark Marxist revolution "is not projected into a future but injected into the present, making it so the present feels foreign and the future feels possible" (Rikowski and Ford, 2019). 'Primitive' thinking which enables the theurgy of dark Holomarxism is not exclusive to tribal peoples but is a structure of thought common to all that can access it.

[W]hile the primitive resides within us all, and while it implies some sort of cosmic liaison between human beings, animals, plants, and the stars, sometimes a demonic liaison, it's also an everydayness present in the sensual, in the erotic, in the vital, in a joyous accord of love, of friendship, of camaraderie. (Merrifield, 2011, p. 184)

The project of magical Marxism (Merrifield, 2011; Ford, 2017) is the leap from a dead world of zombie economics into a rich world of magical desires, a world where we can live out the primitive. Red Biocentrism is a dark, green Marxism because it recognizes that in the Anthropocene, there is no leap into the 'primitive' future of an earth in common, if our communism cannot act upon and organize for the liaison which Merrifield identifies. Conjuring dark spirits of Marxism to scare the bourgeoisie is also essential to Red Biocentrism!

2. *Red Biocentrism is feminist, pro-witch, and (eco-)sex-positive.* Insofar as Red Biocentrism requires further extension of proletarianisation through identification, to solidarity with

¹² Dalla Costa, declared, "we are challenging the domination of capital which has transformed our reproductive organs as much as our arms and legs into instruments of accumulation of surplus labor; transformed our relations with men, with our children and our very creation of them, into work productive to this accumulation" (Dalla Costa & James, 1975, unpaginated)

the wider collective (point 6 above), sex and collective consciousness are inseparably intertwined aspects of the movement towards unity, from the erotic, the 'magic' of unity with sexual partners, to group identification, species-being and the panspecies widening of the Self (Naess, 2008; Fox, 1995, 2016). The basis of ecosexuality is an acceptance of an erotic energy¹³ existing in all of nature, moving through and around us. In an echo of Merrifield, for Hagamen "Sexuality is a potent and precious expression of this life energy, and it represents our primal desire to merge with Life itself" (Hagamen, 2016, p.28)

As a social movement, ecosexuality emerges out of the deep place in our bodies that is retching in the pain we are inflicting on the world - on ourselves - and is grasping for the only thing that can bring it to an end: the rapture and pleasure of humbly submitting to intimacy so profound we begin to feel the Earth simultaneously as lover and as Self. (Hagamen, 2016, p.28)

There is a serious attempt here to locate an important, indeed an incommunicably deep locus of reconnection, an undeniably powerful drive to draw together community and place in an embrace seemingly forgotten, the rapture of contact. Marxists should not treat lightly the possibility that the erotic, like the 'magical' primitive, acts as an unparalleled force for reconnection and collectivism. That expanded sense of 'we-Self' that starts in sexual union and offers the possibility for loving others in solidarity and support pushes the boundaries of class consciousness towards what Joseph Dietzgen called *World Consciousness*. For Anderlini-D'Onofrio (2016) as for McIntyre, sex is "the balm that heals the split between humans and Gaia" (McIntyre, 2012, p.118), so, of course it is not without reason that non-reproductive sex became an obsession with early capitalism for its dangerous power to disrupt the necessary cycle of the reproduction of labour (Collard and Dempsey, 2018, p. 6), as so vividly conjured by Silvia Federici (Federici, 2014, pp. 194-5) in the figure of the witch. Reproductive labour was rendered cheap, and then women's activities defined as non-work, consigning women's bodies to the realm of non-human nature to be used up and exploited without any of the old recognition of the sacredness of non-reproductive sex¹⁴. Duty and chasteness replaced the old order, reproductive labour a

¹³ A movement notoriously prefigured by that most wayward of magical Marxists, Wilhelm Reich (Ollman, 1979).

¹⁴ "You'll lose your mind and play / Free games for May" sang Syd Barret! Precapitalist relations provided the conditions for the bacchanalian, celebratory rites of May, the infamous revels that puritanism and early capitalism sought to quosh, as best exemplified in Phil Stubbes' *Anatomie of Abuses* describing the social customs of England in 1583:

The order of them is thus, Against May, Whitsunday or other time, all the yung men and maides, olde men and wiues run godding ouer night to the woods, grouse, hills & mountains, where they spend all the night in pleasant pastimes, & in the morning they return bringing wt them birch & branches of trées, to deck their assemblies withall ... But the cheifest iewel they bring from thence is their May-pole, which they bring home with great veneration, as thus... I haue heard it credibly reported (and that, viua voce) by men of great grautie and reputation, that of fortie, thréescore, or a hundred maides going to the wood ouer night, there haue scaresly the third part of them returned home againe vndeified (Stubbes, 1973, unpaginated – *Lords of Mis-rule /The order of May-games*)

The attack on the sacred sexuality of precapitalist ritual was so relentless as to successfully cause these rites to be reviled (Pearson, 2007), and spoken of little in public, driven underground in the wake of what Shuttle and Redgrove contentiously termed the "nine million menstrual murders" (Shuttle & Redgrove, 1999, p.198) of Medieval Europe. Peter Gray powerfully summarises the assault on the old sexual order thus:

[t]he creation of a purely malefic figure of the Witch was an attack on women, though men too were burned. Woman was attacked in this way to enable the state to enclose the common land. Woman was attacked to

free resource for husbands and capital to exploit. As Reich noted in the 1930's "[f]rom the attitudes of bourgeois ideology towards natural sexuality, one could easily infer that it served the purpose of safeguarding economic interests" (Reich, 1976, p.123). The 'relegation' of women as (dangerously) 'close to nature' (Collard and Dempsey 2018, p. 8) is regarded by Red Biocentrism as a ground for collective strength, struggle and an education in erotic reconnection.

Why Red Biocentrism in education?

As Collard and Dempsey explain, the 'reproductive realm' represents that "iceberg of patriarchal capitalist accumulation" (Collard and Dempsey, 2018, p.8) that, dwarfing the formal economy, made possible the catastrophic, exponentially accelerating throughput of late Holocene hyperconsumption. This vast reproductive hinterland includes all those 'cheaps' whose inexhaustibility Moore (2017) reminds us never to accept as any more than a Capitalist gesture of accumulation. Among these, giving birth, parenting, subsistence production, but also the reproductive capacities of nature itself, the energetics of ecological systems, the very work of photosynthesis. Also, of course, *education* in its broadest sense.

What is the product of a Red Biocentric education? Like capitalist education, like all education, it is subjectivity. Let us be clear, education plays a central part in the reproduction of the conditions for the possibility of capitalism. The wage labourer's subjective existence is dependent upon a relation to capital established by and through educational process (Rikowski, 2002), likewise the capitalist's. That section of the *Grundrisse* wherein Marx offers his analysis of pre-capitalist economic formations explains that "[t]he production of capitalists and wage-labourers is a major product of the process by which capital turns itself into values." (Marx, 1965, p.118)

The Holocene saw a revolutionary transformation in the forms of human subjectivity that accompanied the 'separation' of labourers from the nexus of relations which comprised their precapitalist ecology (Mezzandra, 2018). What Marx calls, rather provocatively, "*natural conditions of existence*" (Marx, 1965, p.87) have a dual character – an objective and a subjective aspect, an outside and an inside. For those producing within such conditions, the "producer occurs as part of [an ecology,] a family, a tribe, a grouping of his [sic.] people... It is as such a communal part that he has relation to a determined (piece of) nature (let us still call it earth, land, soil), as his own inorganic being, the condition of his production and reproduction." (Marx, 1965, p.87) During the course of the late Holocene, human consciousness underwent a process of subjective estrangement from these 'natural conditions' that accompanied the emergence of the capital relation. In respect of this weirdly abstracted subjectivity, whilst the biological requirements of ongoing lived entanglement with nature are retained,

what requires explanation is not the *unity* of living and active human beings with the natural, inorganic conditions of their metabolism with nature ... What we must explain is the separation of these inorganic conditions of human existence from this active existence, a

remove her control over her womb. Woman was attacked to divide the sexes and rend the social fabric. Woman was attacked to destroy the sacred in nature... We do not need to follow Marx, we simply need to follow the money. The process has continued because the enemy has inexhaustible greed and diminishing returns. It is not simply the commons that are enclosed, everything is being sold into the hands of the few. (Gray, 2013, p.11)

separation which is only fully completed in the relationship between wage-labour and capital. (Marx, 1965, pp. 86-7)

Capital, as we know, deployed enclosure as the means of producing wage labourers, of stripping women of their power within a gendered division of labour by devaluing non-monetary 'cheap' labour, and of effecting this separation.

The form of education in the Anthropocene will be necessitated by a revolutionary transformation equal to that of the late Holocene. Its aim is the production of revolutionary biocentric subjectivity, capable of extending the ecological Self across class and species to turn identification and solidarity into realisation and flourishing. Specifically *unlike* capitalist or bureaucratic socialist education, it is not merely the production of the subjective aspect of labour capacity.

A red biocentric educational project for the Anthropocene cannot set its sights on mere knowledge, nor even understanding of the environmental crises which beset us, but rather an aspiration that children and young people *feel* it, *live* it. If, as Steven Jay Gould so powerfully claims, "[w]e cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well – for we will not fight to save what we do not love" (Gould, cited in Orr, 2004, p.43), then red biocentric education aims to take up and extend the exhortations of David Orr further, to care for the earth as a lover and partner (perhaps even "proposing a major shift in the leading metaphor that informs cultural interpretations of the planet we humans inhabit and share" (Anderlini-D'Onofrio & Hagamen, 2015, p.4), from *mother* to *lover*), building a relationship of respect, mutuality, agape, and perhaps also eros. Red biocentric education intends to produce young people capable of receiving the responsibilities of biotic citizenship in these collapsing times, without despairingly retreating into eco-anxiety (Pihkala, 2018), ecophobic passivity and incapacity, citizens who are as intentional about the kind of sex they practice as the food they eat and the products they consume.

If consciousness or subjectivity does not stand above and against materiality, if in the Anthropocene there is no separation between actor and backdrop, then, whilst it is necessary in order to produce biocentric consciousness that the structures of society be transformed, it must also be true that a revolution in the social, political and economic structures of society cannot be deep or sustained without a revolution of the mind¹⁵. A century ago, Bogdanov and Pannekoek were as one in applying Dietzgen's philosophy to reach this conclusion. The pedagogical implications of their approach are obviously considerable, and demand the kind of revolutionary schooling activity which Bogdanov, with Gorky, Lunarcharsky et al aspired to on Capri and later Bologna and Paris. In his exposition of Pannekoek, Gerber (1978) takes the dialectic of 'inner' and 'outer' revolutions to a spontaneist conclusion in declaring, "[a]lthough the outcome of... revolution will be decided by the physical power of the working class, it is not this power alone that is decisive, but the "spiritual power" which precedes it and determines its use. Revolution is thus a victory of the mind, of historical understanding and revolutionary will." (Gerber, 1978, p.17) Bogdanov formulated his proletarian systems thinking in response to just this dialectical challenge¹⁶, drawing out of the slipstream of nineteenth century materialism a prefiguring of the

¹⁵ For all its talk of the 'new man', actually existing socialism always led too much by the nose for the transformation of consciousness itself to guide and deepen structural change.

¹⁶ Mansueto (1996) agrees with Williams (1980) that the heart of the much debated dispute between Lenin and Bogdanov was the question of the transformation of consciousness. Lenin's emphasis on the role of revolutionary activity and of the vanguard occurring along the fault-lines of capitalist contradiction, contrasts with Bogdanov's vision of organic change across wide swathes of the proletariat through gradual historical time, with pedagogy and organization coevolving, as "social development, like cosmic evolution generally, was a product of growing organization. When a

challenges of the unimaginable Anthropocene; for it was Dietzgen's autodidactic ideal and the manner in which it found political form in support for spontaneism which hung over the proto-systems theoretical perspective, and which still haunts the holistic project of an Anthropocene education for Red Biocentrism.

Unity is to be found in action, in sex and solidarity. Marxism has rarely been sexy – a rediscovery of the place of sex 'magic' in Holomarxism is essential in biophilia. This puts sex and relationships learning in a central role in the red biocentric educational project for the Anthropocene, along with a rich and varied experience of learning in place, outside learning and a burgeoning understanding of the network of relations which enmesh us in ecological and erotic nexūs.

In the Anthropocene, environmental education is erotically charged, as it calls us all, children and adults into nature's embrace. First spring warmth on freshly exposed and wildly sensitive skin, the softest of breezes bringing up goosebumps; the giddy heave of the water fast moving against waders; the fungal musk of humus on a damp, silent forest morning - this is the erotic pull of learning in and among our 'natural conditions'. But our environmental education should also help us to appreciate that at the cusp of the Anthropocene, we live in a pornographic relationship with nature¹⁷, one where mutuality and organic holism are fractured by the complicatedness of commoditised estrangement. Desensitized to the lightest of brushes with our environment, we so often seem to require the backlit hyperreality of super-high-definition widescreen exposing the impossibly unseeable (the snow leopard, the angler fish) in obscene detail. The musty closeness of the forest floor does not sufficiently excite. Identification (Naess, 1988) remains the basis of overcoming this alienation.

The Blood of the Earth, the Blood of our Children

In the UK, as across the world, our children are rising in defense of the planet (BBC, 2019). As we lurch into the Anthropocene, tens of thousands of young people have been taking part in a school strikes in what must surely be understood as an act of solidarity and identification with those ecosystems and their many and varied species which provide our wider Self. As in the time of Marx's writing, capital has ransacked the commons of childhood, appropriating children's time for the benefit of the employers, always pushing back the limits of children's working days in schooling. The international credit system – the financial markets and the banks – “often conceals one of the sources of primitive accumulation in this or that people... A great deal of capital, which appears today in the United States without any certificate of birth, was yesterday, in England, *the*

group emerged within human society which understood how to organize at a socialist level, it became possible at least in principle to reorganize society on a socialist basis.” (Mansueto, 1996, p.50)

¹⁷ Of course I use the term loosely, though there is an argument that ecosexuality can stretch as far as even ecoporn activists Fuck For Forest operating within a deep ecological framework. Măntescu (2016) claims that for Fuck For Forest, the failure of western societies to 'communicate with nature' should be met “not by suppressing Nature in order to make nature listen, but rather make Nature listen by acting in accordance with Nature's drive.” (Măntescu, 2016, p.22) The polysexuality of Fuck For Forest may be a world away from heteronormative mundanity — its lesson to engulf the other, for the other to be swallowed up in oneself. The line argued by Măntescu takes the radical, perhaps extremist ecosexuality of Fuck For Forest into realms which echo Warwick Fox's (1995) transpersonal ecology: the other here “can be human or non-human, organic or inorganic, from this world or other-worldly . 'The other' is not exterior, it is not marginal; the other is not invasive, but rather it is an opportunity for self-expanding into the world” (Măntescu, 2016, p.23) The argument is indeed redolent of Naess' whilst also exemplifying something of the freewheeling ecosexuality of Callenbach's famous *Ecotopia* (Callenbach, 2004): “when suppression dominates social [and primarily socio-sexual] interaction, inner- and outer-exploration fades away. Deepening the understanding of the-self-in-Nature is, in the FFF view, seeing otherness as formative and not as occlusive.” (Măntescu, 2016, p.23) The Fuck For Forest response to Western body-consciousness is to reject the capitalised forms of unhealthiness to meet “societally induced anxieties, untold fantasies or superfluous caprices related to corporeality... going naked in front of the camera in FFF shootings means leaving the western body-ideal behind , together with its normative self.” (Măntescu, 2016, p.24)

capitalised blood of children." (Marx, 1990, p.920) Marx was right, the blood of our children mingles with the blood of the earth as both are shed to yield succor to bloated capital's ceaseless accumulative expansion. The laws which protect the enclosure of our common inheritance Marx calls 'bloody' (Marx, 1990, p.896) for their disinheriting of our children from their a shared commons of culture, of history, of homeplace. Red Biocentrism follows Chris Knight (1991), Silvia Federici (2014), Peter Gray (2013), and the uprising of Extinction Rebellion (Real Media, 2019) in ritual celebration of our shared blood. In the name of blood Red Biocentrism, deep green holomarxism, we exhort our children, walk out of school: *strike!* Find common cause with the beasts of the field and wildflowers of the meadow, in the Soviet of All Beings. All power to the Soviet!

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