

Working Environments, Unruly Natures

No Politics of Work without Nature, No Politics of Nature without Work!

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A

Theo Aalders

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“Future-Making as Labour: The Work of Infrastructuring “Green” Futures”

This contribution is an intervention into recent conceptualisations of future-making and suggests considering it in terms of the labour relations that undergird different ideational imaginaries of the future. We suggest that future-making as labour – or the labour involved in future-making - allows a unique understanding of materially unequal power relations between different groups defined by class, gender, and race. This aspect of future-making, we argue, is particularly evident in supposedly sustainable or “green” large-scale infrastructure projects, such as hydropower dams. The labour of construction works takes place in the present to build infrastructures for the future.

In a world in which the future seems increasingly perilous – to a degree that even the future itself appears to be threatened – contemporary scholarship in anthropology, geography, and social sciences struggles to understand how groups and individuals make and unmake their own as well as planetary futures (e.g. Appadurai, 2013; Jasanoff and Kim, 2015; Knox, 2014; Müller-Mahn, 2020).

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Many of these conceptualisations consider the ‘making’ in future-making primarily as a non-material or discursive practice with a focus on cultural practices (Appadurai, 2013); imaginaries (Milkoreit, 2017); dreamscapes (Jasanoff, 2014); fictions (Beckert, 2016); visions (Carse and Kneas, 2019); or “hot air” (Hockenhuell and Cohn, 2021).

In contrast to these often ideational conceptualisations of future-making, we suggest a materialist interpretation of future-making as labour. We show this by using examples of large-scale infrastructure projects in East Africa. The production of sustainable or “green” futures is particularly important in this context, as they are a necessary pre-condition for the ability to imagine any future at all. Here, the labour aspect of future-making is particularly apparent as construction workers literally build roads, dams, and railways as monuments for a time yet to come. However, labour does not only mean the stereotypical working man in a hard hat, but also less visible forms of labour, especially by women, that are necessary for the success of the megaproject that eventually symbolises immaterial imaginaries of the future.

The paper is based on preliminary fieldwork in Kenya and Tanzania and is mainly aimed at developing a conceptual argument about future-making as a material practice based in labour relations. We welcome comments on the general viability of this conceptualisation and whether or not it is actually innovative at all.

Keywords: Future-Making, Labour, Infrastructure, East Africa

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“Cheap fertilizer for whom? Struggles around the appropriation of phosphate rock in Northern Peru in a transnational perspective”

In the current agro-industrial model, chemical fertilizers constitute a key input for the production of cheap food. While the interrelation between nitrogen-fertilizer and fossil energy is relatively well known, we know much less about the minerals extracted in mines to produce the other nutrients used in fertilizers. Particularly phosphate rock, the primary source for phosphorus in chemical fertilizers, has become a strategic resource for a number of states after a series of price hikes between 2007 and 2013. While reserves are relatively abundant, political factors in producing countries, such as export restrictions or projects of domestic value creation, are the primary obstacles for continuing the global through-flow of nutrients in industrial agriculture. With a focus on the Bayóvar mine in Northern Peru, which was created as a new commodity frontier during the price hikes, I will analyze actors and conflicts in contemporary phosphate extraction and processing in an exemplary manner. The mine was first opened by former Brazilian state company Vale, at a time when the Brazilian Development Bank, still one of largest shareholders of Vale, became concerned about the external dependence of the Brazilian agro-sector on transnational fertilizer producers. However, one of these producers, The Mosaic Company took over Vale’s fertilizer section after the 2016 coup d’état against the center-left government of Dilma Rousseff. Mosaic became the majority owner of the Bayóvar mine and Peruvian phosphate rock became the main source of imports in the USA, where phosphate rock reserves are declining and Mosaic is struggling with stricter environmental regulation. In Northern Peru, after 10 years of phosphate mining with adverse ecological impacts and few tangible economic improvements, local communities increasingly organize to demand a revision of the concession contract. At the same time the new leftist president Pedro Castillo wants to break with primary export model and built a national fertilizer industry to

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supply the national market and replace imports from companies, such as Mosaic. These issues became even more pressing as fertilizer prices continue to climb upwards in 2022, while projects of using phosphate rock for organic fertilization remain marginal.

Keywords: fertilizer, phosphate, Mining, agriculture

John Peter Antonacci

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“There is a Large Field Before You’: The Seven Years’ War, the War- Making as Environment-Making State, and the Opening of the Great Frontier, 1756- 1763”

The Seven Years’ War (1756- 1763) represents a watershed moment in the history of modernity. This article aims to advance two interconnected arguments, one historical and one conceptual. Historically, the article argues that, through the British state’s increasing involvement of the management of North American Environments during the Seven Years’ War, the British state transformed the continent, producing the conditions for the accumulation of capital by making the American West accessible to capital through a series of revolutions in the procurement of cheap labor, food, raw materials, and energy. The Seven Years’ War thus makes possible the opening of the “Great Frontier,” and its associated windfall profits. Conceptually, the article argues that the state produces and reproduces the conditions of accumulation through dialectically interpenetrative processes of war- making and environment- making. States make environments as they make war and make war as they make environments. The mobilization of these interconnected arguments opens a view in which the rise of Anglo- American hegemony in the 19th and early 20th Centuries was made possible by British war- making/ environment- making state led transformation of the North American continent during the Seven Years’ War, highlighting the double- centrality of war and environmental change in the history of early modern capitalism.

Keywords: Seven Years' War, Great Frontier, Proletarianization, Agro- Industrialization

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“Coloniality of Labour and Agriculture in the Capitalist World-Ecology”

The proposed communication is based on the processes of insertion of migrants in world agriculture, with four objectives. The first objective is to highlight the characteristics of post-colonial current migration. The second objective is to show how, at the global level, migrant labour is not naturally cheap but is produced through a set of social, political and economic relations influenced by the colonial heritage beyond colonialism and colonial administrations. The third objective is to highlight that the reproduction of cheap agricultural labour is also based on the coloniality of labour, i.e. on the construction of a hierarchy of jobs that subordinates the jobs that are closest to the activities of social reproduction. Finally, the fourth objective is to show how the questioning of the power relations in which migrant agricultural workers are embedded requires a process of decolonisation not only of migration but also of farm work, which is internalised in the labour hierarchy because it is very close to the work of social reproduction.

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Keywords: Labour, Coloniality, Migration, Social Reproduction

Dennis Lucy Aviles Irahola

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“Feminism and World-Ecology: A Latin American Perspective on the Exploitation of Women's Work and Nature”

Appropriation of work of the many for the benefit of a few privileged groups is one of the pillars of the capitalist world. The world-ecology approach argues that, in order to cheap nature, the work of women along with those of other groups had to be degraded and rendered as less worthwhile. Functional to this gendered and racialized degradation of work, was the treatment of women, indigenous and African populations as part of nature, and not of society. From a Latin American feminist perspective, two questions emerge out of these affirmations.

First, for many decades, women and feminists movements in the South have denounced women's subordination in the gendered economic system and false essentialisms linking women with nature. Related to these criticisms is the, mostly, northern view of southern women as historically passive and homogeneous subjects. However, women's and indigenous' waves of resistance against gendered and racialized domination and the cheapening of nature are to be recognized since colonial times. Is the reluctance to acknowledge southern women as heterogeneous subjects with specific interests and power functional to the capitalist world-ecology?

Second, the production of theories explaining the world system as well as the local forms of privilege and subordination, including feminist theories, analyse the continuation of the historical colonial process. To what extent do the world-ecology approach and the views of southern feminisms complement or antagonise each other in epistemic, historical, and propositional ways? Moreover, have these views the potential to enrich each other?

This work proposes i) to escape the historical reading of southern women as passive subjects of exploitation and contribute to the recognition of their constant resistance and ii) to discuss how world-ecology and feminist views differ and coincide in their theorization of the historical and current capitalist organization of nature and life.

Keywords: southern feminisms, Latin America, ecofeminism, decolonization

B

Crystal Bartolovich

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“Labor Is(n't) Everything?”

Prominent voices in Native Studies have taken issue with what they describe as an over emphasis on "labor power" in Marxist theorizations of capitalism, including, according to them, privileging labor in the narratives it produced about its origins. Patrick Wolfe's influential essay on settler colonies argues that native peoples were marked, in general, for elimination rather than labor exploitation,

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and, therefore, that typical theorizations of primitive accumulation do not accord well with it. Arguably (and, indeed, it has been argued, by Foster and others that) this claim is not entirely fair to the nuances of Marx or Marxism, but a lot of recent important work has been done to focus on (dispossession of) land itself rather than emergence of labor exploitation per se as the key experience of native peoples in colonialism. With a focus on the fecund insights of Jason W. Moore's understanding of capitalism as world-ecology, a necessary imbrication of nature-society, this paper will bring Natives Studies into conversation with it on the land/labor controversy as it has developed in the wake of Wolfe's essay.

Keywords: Labor, Land, transition debate, Marxism and Native Studies

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“Social reproduction at the commodity frontier. Food procurement strategies among migrant workers in Kenya’s flower farm”

This contribution presents research conducted among workers employed in the Kenyan floriculture sector. During the last thirty years, the floriculture industry has delocalized the production of cut flowers to areas at the periphery of the global circuits of capital, transforming ecologies and attracting migrant workers wherever it expanded. Building on the conceptualization of global floriculture as a commodity frontier, we explore migrant workers’ food procurement strategies at the flower farms of Naivasha, Kenya, and discuss how the frontier redefines and is defined by these strategies. The study shows how workers pursue food security through rural-urban food transfer and food sharing embedded into diversified multi-local household strategies and networks of reciprocity. Two major findings are presented: first, we point to social reproduction, in the form of eco-reproductive subsistence labour, as a key element to understand the dynamics of global capitalism expansion via commodity frontiers. Second, we show how food transfers take place within expanded networks of multi-local households that tie the frontier to distant geographies, ecologies, and livelihoods, embedding the latter into global chains of roses and carnations. Against this backdrop, we contend that distant rural livelihoods and ecologies are being bent to the frontier’s interest well before they become part of the frontier itself.

Keywords: commodities frontiers, social reproduction, floriculture industry, Kenya

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“Working plants. and emancipation of the commons”

The commoditisation of the economy can lead to the view that plants have become a new working class which, as Marx theorised, is constituted in its relation to other classes. However, it is necessary to delimit which plants can be considered as workers, by what means they are reduced to this status, and what are the strategies of overflow that this situation offers. In this presentation, we will outline some lines of research by comparing different production and cultivation strategies. On the one

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hand, we will refer to the emblematic plant of the Argentinean economy: soya. Secondly, the model proposed by the Unión de Trabajadores de la Tierra (UTT). Thirdly, to certain works of art in which living plants are participants in the work. In this triple comparison, we will highlight the different approaches to plants that allow, in some cases, to reduce them to exploited workers and, in others, to forms of association that emphasise their inter-species collaborative characteristics. The comparison between different processes will allow us to establish different capital/labour relations in terms of appropriation of the commons or emancipation of the commons through alliances that have as a principle interspecies social justice irreducible to the quantification of ecosystem services measured on the basis of efficiency and development (understood as growth/heating) of the economy.

Keywords: Plants, interspecies social justice, vegetal thinking, Degrowth

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“Beyond the Realm of Necessity? Productivity, Growth, and World-ecology”

Green thinkers have often critiqued Marxism on account of its alleged productivism and fetishization of labor-saving technology. Ramachandra Guha calls Marxism “an ideology which has an unshakeable faith in the powers of modern technology to tame and conquer nature”; Hans Jonas characterized it as the “executor of the Baconian ideal,” prone to a “cult of technology” and the “seduction of utopia.” As Marx’s precocious ecological insights have been recovered by ecosocialist thinkers, Marxism’s green bona fides have been bolstered. It is now widely understood that Marx was not an uncritical advocate of technological mastery who ignored environmental harms and constraints; quite the contrary. Nonetheless, the character of Marx’s ecological legacy is fundamentally contested from within the tradition, as reflected in contemporary debates between degrowth and ecomodernist wings of the ecosocialist left.

Both positions find ample support for their positions in Marx’s work. This is not a merely scholastic matter; these historical currents largely structure contemporary left ecopolitics. Thus, if one finds neither left ecomodernism nor degrowth wholly compelling and wishes to develop a more satisfying articulation of the desired arrangement of work, growth, and ecological stewardship, it may be useful to return to Marx and work carefully through some of the apparent contradictions in his thought. Marx was keenly aware of, and often extolled, the emancipatory possibilities of productivity-enhancing technologies and strategies, as well as the capacity-expanding potential of economic growth. At the same time, he also understood the terrible social and environmental costs that often accompanied them, both among the industrial working class and in the colonies. He attempted to reconcile these tensions by arguing that the destructive aspects of growth and labor-saving tech and organization derived from their capitalist form, and that communism would essentially sublimate their negative aspects. In what follows, I briefly reconstruct Marx’s solution, and then evaluate its merits and shortcomings in light of contemporary world-ecological insights concerning strategies of “cheapness” and the importance of non-human work. In so doing, I hope to contribute constructively to a discussion about world-ecology’s positive political program with respect to life and labor.

Keywords: Labor, Productivism, Technology, Ecomodernism

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C

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Co-authors: Indigenous authorities of the Union of Ch'orti Maya Indigenous Peasant Organizations, Nuevor Dia, members of the Ch'orti' Maya Institute of Science and Tehcnology, Upejkna'r e Ja' and students of the Ch'orti' Maya Pluriversity.

“The We politics of Planetary Justice: Ch'orti' Maya Reproduction and the Work of Unruly Natures”

This paper suggests the centrality of *other* ways of being in, knowing and relating to time-space as essential to building upon and stretching upon the key insights of the Capitalocene. Specifically, it asks the question what work do unruly natures do at this moment of world ecological crisis? Unruly natures being, in our eyes, the relation between human and more than human nature that refuses (Audra Simpson) to submit to any version of the holy trinity: capital, labor, land.

Rather than *limiting* our understanding of Ch'orti' Maya labor (social reproductive, disposable, exploited migrant) and environmental change to nature-society dialectics (internal relations), or positing that Ch'orti' Maya knowledges and cosmovisions *are somehow outside* of modernity, we seek to do the slow labor of grasping the shifting and co-constituting relations between world colonial-capitalist history, Ch'orti' Maya memories, and everyday knowledges, practices and relations (hidden and visible) of production and social reproduction. We suggest that even though knowledge-practice production/reproduction has been and continues to be conditioned by the Capitalocene, especially its colonial and imperial expressions; socio-cultural-environmental reproduction and refusals also rely upon “work” that navigates other time-space dimensions.

First, we situate and differentiate the proposal of the Ch'orti' Maya Pluriversity from what is circulating in academia as pluriversalism. We share our pedagogy in construction, a pedagogy that far from rhetorically rupturing with modern thought or equalizing ways of knowing, dialectically reflects and builds upon Ch'orti' Maya history and practice. We highlight how lessons learned in practicing what we might call radical politics in multiple spheres: refusing dispossession --debt, hunger, extractivism, criminalization--anti-capitalist, anti-colonial, anti-patriarchal, gave birth to the Pluriversity proposal.

Second, we situate the present moment of living the world economic crisis with its racialized, patriarchal, and ageist contours within what we know about the space/place where Ch'orti' Maya have experienced their labor, lives, and environments most devalued: their home and communities. It is here that we suggest how the world ecological framework has explanatory power over the past and present, at the same time we insist on how those who research, re-member, and renovate pre-Capitalocene continuities refuse the *totality*.

Third, we problematize what *we* means: fifty shades of co-research, co-authorship, the tensions and the crucial need to embrace them even when they unsettle or push back upon world ecological constructions. I, Jennifer, might see Gramscian praxis in Omar's activism and nature-in-

society/society-in-nature dialectics in Ch'orti' Maya struggles. But if I were to place what I experience into any one explanatory box, no matter how brilliant and emancipatory it might be, I would be stealing, assimilating (Betasamoke Simpson) from the Ch'orti' and I would be coddling the radical promise of world ecology rather than pushing it. It is in the dialectical work of unruly natures—that we produce, not assume a *we* that can contribute to planetary justice.

Kenyon P Cavender

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“Production and Reproduction in Fordist Michigan”

The relationship between production and reproduction in capitalism is one of its most animating contradictions. Capital is driven to expand the commodity form, to push it into all areas of life, and yet it is hampered by its need for Cheap Nature: an appropriation, in part, of the reproductive powers of the web of life external to the commodity market.

These two processes, the exploitation of waged labor and the appropriation of unwaged labor, are not strictly distinct. They enable and build on each other in historically and geographically specific ways. This paper aims to look at the relationship between production and reproduction in Fordist Michigan at the turn of the 20th century. The Detroit area was crucial in laying the groundwork for the ascendancy of the US as capitalist hegemon, and the changes in relations of production after 1900 reverberated through the US empire. In particular, we will examine how Fordism as a management practice sought to unify the spheres of production and reproduction under the control of employers in service of a new regime of capital accumulation.

Keywords: Social Reproduction, Fordism, Primitive Accumulation, Industrial capital

Franciszek Chwałczyk

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“Unruly nature of urban environment: is enduring the heat and adapting to it a work? The case of older adults in Warsaw”

In this talk I would like to present the „Embodying Climate Change – Transdisciplinary Research on Urban Overheating” (EmCliC) research project and some of our results up for discussion in the light of the world-ecological concepts. In EmCliC project we aim to understand people’s everyday, embodied (but not only) experiences of climate change (considered as both an environmental and social phenomenon) in connection with practices and discourses.

We especially focus on: 1) heat and heat related phenomena as those are one of the main media of climate change and aspects of environment crucial to human life, 2) urban environment as a space prone to overheating (e.g. Urban Heat Island effect) and 3) older adults as a group prone to become vulnerable and often overlooked in research or policy. We employ and mix different methodologies, quantitative and qualitative. For this occasion, I would like to focus on the results from focus groups research (81 participants over 65 years old, 14 singular meetings in groups of around 6 participants, conducted in July and August of 2021 in Warsaw, Poland) with addition of municipal policy analysis.

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I want to explore question if enduring and/or adaptation to heat (especially during summer and heatwaves) can be considered a labor (non-paid, reproductive, „cheap”...). From this point of view older adults can be considered a precarious, disposable workforce - but still not an uniform group, as e.g. class and gender differences can be seen in the results. One of the products of such labor would be knowledge how to deal with heat. That knowledge is important, as it is transferred intergenerationally and supports the reproduction of the workforce and stability of its environments. This brings up a question about means of (re)production of environments and means of adaptation. Participants discussed e.g. having Air Conditioning (A/C) – its affordability, benefits and harms – and allotments or pieces of land outside the city (as an adaptation and coping measure). The A/C seem especially interesting case here, as looking at the participants statements and discussions one can draw a parallel with issues of mechanization and automatization of work. A/C is often problematic for participants because of very limited control it gives them over environment making. It seems to force them into alienated mass production of standardized microclimates. Which are inadequate for the diverse conditions in which people live and for the different needs of different bodies.

Finally, I would like to take a glimpse at those questions and results from more general perspective of World-Ecology and Urban Studies – e.g. Planetary Urbanization, Urban Political Ecology, (Critical) Urbanocene and Capitalocene. As cities become less hospitable and more unruly because of the climate destabilization, question arises: are those rising temperatures in cities, changing conditions and related phenomena point to emergence of one of the next natures(in-capitalism)? Will (and how) it be followed by discovering it as a new frontier and opening it for extraction? Research presented here is being conducted as a part of the „Embodying Climate Change – Transdisciplinary Research on Urban Overheating” (<https://www.emclic.com/>) – project funded from the Norway and EEA grants 2014–2021 under the Basic Research Programme operated by the Polish National Science Centre in cooperation with the Research Council of Norway (grant no 2019/35/J/HS6/03992).

Keywords: heat, climate change adaptation, older adults, urban environment

Raymond Craib

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“Selfish-Determination: Capitalism and Decolonization”

In 1967 Santo island chief Paul Buluk, frustrated by the intransigence of British and French officials in the New Hebrides, had a petition drawn up and sent to the British High Commissioner and to the United Nations. The land question on the island of Santo—the largest and most economically-important of the 83 or so islands that composed the New Hebridean archipelago—could no longer be deferred. Continued encroachment by French colons into the ‘dark bush’ and repeated refusal by colonial officials to address illegal land occupations and theft compelled Buluk and his ally Jimmy Stephens to petition directly to the UN for relief and to invoke UN Resolution 1514. It is also compelled them to create a new organization, Nagriamel, to fight for the rights of Santo bush people.

Simultaneous with the activities of Buluk and Stephens, an ocean away, a contingent of wealthy, largely US-based libertarians pursued a very different form of self-determination: the creation of a new country governed entirely through contractual, capitalist relations. Inspired by the fictions of Ayn Rand and the myth of Robinson Crusoe, these individuals (which included Nevada coin dealer

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and land developer Michael Oliver, USC philosophy professor John Hospers, Rand's former acolyte and paramour Nathaniel Branden, and international finance guru Harry Schulz) hoped to forge their own private archipelago. In an implicit perversion of Resolution 1514, they sought individual self-determination in the very places undergoing decolonization struggles, believing that in such locales there would be, as Oliver wrote, "little problem in purchasing the land, or in having the opportunity to conduct affairs on a free enterprise basis from the very beginning." One of those places was the New Hebrides.

The plot then thickens and twists. On the archipelago, Nagriamel allied itself with Oliver and against another anticolonial movement, the Vanua'aku Pati [VP]—led by Anglican priests and intellectuals such as Walter Lini, Barak Sope, and Grace Mera Molisa—which formed in the early 1970s and drew inspiration from the examples of Ghana, Tanzania and the Black Power movement. With Oliver's financial and logistical support, Nagriamel launched a rebellion to secede from the new state of Vanuatu in 1980. This paper asks a basic set of questions: Why and how did an anti-colonial movement come to throw in its lot with a group of hypercapitalist investors and grifters? What understandings of self-determination drove this unusual alliance? Was it unusual? It was more than just coincidence that market libertarians based in the US, Australia, and the UK, sought to create new, private countries in the Caribbean and southwest Pacific during those regions' most intense periods of anti-colonial agitation—so how did these adventure capitalists shape processes of decolonization and how, in turn, did anti-colonial movements use these financiers and interlopers to their own ends? And what do such micro-histories tell us about new forms of primitive accumulation, the capitalocene, and the macro-history of dispossession and colonization?

Keywords: Decolonization, Primitive accumulation, Libertarianism, Capitalism

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"Sustaining life and nature in the household: environmental labor in the domestic sphere of families in La Campana, Nuevo León, Mexico."

This study addresses the following question: how do environmental care behavior interact with care work and paid work? This research is situated in households in La Campana, Nuevo León, Mexico, one of the neighborhoods with the highest levels of poverty in the city of Monterrey. Women and their families actively participate in different environmental practices, particularly in recycling programs for which they receive economic remuneration from private companies. It is proposed to call these practices environmental labor in the domestic space, since they are daily activities that involve effort and seek human and non-human wellbeing. The analysis is framed within capitalism of world ecology and materialist ecofeminism, since nature and women's work are the backbone of the mode of production. Through a qualitative methodology and ethno-sociological life stories, it is concluded that environmental labor in the domestic space acquires specific impacts and dimensions according to gender.

Keywords: Environmental labor in the domestic space, Ecofeminism, Care work, Environmental care

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D

Tod Davies

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“Working Environments and Unruly Nature: On Walking Out the Door”

Jason W. Moore and Raj Patel, in their book "A History of the World in Seven Cheap Things," vigorously point out that "We need an intellectual state shift to accompany our new epoch." So what 'intellectual state shift' is limping to its end right now? In her book, "Who Cooked Adam Smith's Dinner," Katrine Marçal nails it. It is, she says, "the ecstasy of reason."

But what kind of reason does she mean? What I would like to suggest is that our present idea of reason, separated as it is from 'unruly Nature', is a limited one. A closed door to a wider reality. And we need a key to get out.

Consider the film "Exterminating Angel," by the surrealist filmmaker Luis Buñuel. Its subject is a middle class dinner party. We might even call it Adam Smith's dinner party. When the attendees try to leave after dinner, they find they are trapped, for no apparent reason, in the house. The door is open; they can't walk out. Many horrible things ensue: adultery, torture, murder, cannibalism. Then as mysteriously as they were trapped, next morning they can leave. The whole town goes into a church to give thanksgiving. And no one can leave the church. The end.

Or is it?

Descartes famously defined reason as thought. Mind separated from body. Reason, as an act of mind, is then separate from feeling, an act of body. Body, being inferior to mind, is a product of unruly Nature. The body—Nature—must be repressed in aid of thought.

It's no coincidence that World-Ecology sees capitalism surging forth at the same time Descartes was working on his definitions.

So the body gets increasingly repressed as capitalism goes from strength to strength, building on it as if it's a pyramid scheme with the body at the bottom. The body doesn't go without a fight however. Freud had a lot to say about this particular struggle.

Then there's Jacob Burckhardt. In his book "The Greeks and Greek Civilization," he portrays ancient Greek culture as the most 'rational' and objective the world has ever known, ancestor of our own scientific and rational work. But he is sorely perplexed by Greek mythology. The ancient Greeks appear to have valued the most outrageous works of imagination as much as their own objective methods. As much as 'rational' thought. Burckhardt found this inexplicable.

What if this version of 'rational' is, in fact, totally wrong? What if cultural life force, an ability to change and grow, actually depends on a give and take with the unconscious based in the body? With dreams? With fantasy, with imagination, with what we used to call magic until we split off a part of it and called it science? With, in short, Nature. That we humans are a part of.

What if feeling precedes thought, and without it, thought naturally withers and dies? (Spoiler alert: It does.)

There begins to be an agreement in our culture that separating 'Man' from 'Nature' has not worked out the way as planned. Yet even while we understand that things have to change, lurking at the bottom of our protest is still the same old concept of 'rational' that Mr. Descartes was so big on. Things are 'rational' or 'irrational'. The former is always good (Science! Data! Technology!). The latter always at best childish, at worst deadly (Dreams! Fantasies! Imagination!).

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From Burckhardt's confusion about the Ancient Greeks to Freud's Return of the Repressed, with Moore on the Cartesian error of the dualism Nature/Society, looking at Katrine Marçal and other feminist thinkers on alternative visions, stopping by one or two of Marcuse's insights, and, of course, Goethe's "Faust"—never forgetting fairy tales—we'll look at how 'rational' concepts, and the working environments they enforce, have turned our world into a dinner party where we're all trapped.

Maybe a way forward is to just walk out the door. And maybe the Key, down in the Realm of the Mothers, is to be found in Imagination.

Keywords: World Ecology, Rationality, Imagination, Nature

Ann E. Davis

Associate Professor, Economics, Marist College

“Money as a “Real Abstraction” The Ecological Implications of the Global Dollar Hegemony”

The concepts of the World-Ecology Research Network are essential tools for analysis of capitalism and ecology. In particular, the “real abstractions” of Nature and Society are especially helpful. The goal of this paper is to extend the list of “real abstractions” to account for the apparently automatic operation of global capitalist financial institutions, seemingly beyond control of the participants. I propose that “money” is another “real abstraction” with real effects, with a history, and with alternatives.

The history of the role of the US dollar as a global hegemonic currency reveals its operation and its assumptions. As the issuer of the global key currency, the US is able to issue debt at low interest rates, because other countries can use US Treasury bonds as central bank reserves. This use of US dollars to provide exchange rate insurance to emerging countries makes it possible for the US to receive an uneven ecological exchange, real commodities, for its financial asset, US Treasury bonds. The US dominance of global institutions like the International Monetary Fund also allows it to apply pressure to other countries to maintain their balance of payments, even as the US does not. The notion of efficient capital markets also provides an instrument to pry open emerging market countries to foreign investment, which then commits them to debt repayments. This international financial system allows the US to obtain commodities which risk emerging countries' ecology and humanity, even though the US has used its global credit to speculate on risky financial assets, and to destabilize its operation.

This paper will present the basics of this system, and the possibilities for its reform at the present global juncture. We will consider alternatives, as well as the ongoing potential for financial crises.

Keywords: real abstractions, hegemonic currency, ecology, balance of payments

Ismael de la Villa

Researcher, Political Geography, Complutense University of Madrid

“Extractivism as a way of expansion and accumulation by conservation as a way of monetization in world-ecology. The case study of the Amazonian region and the success/failure of its different development projects (2003-2020)”

During the last decades, specially between 2003 and 2020, it has been observed the emergence of several development projects in Latin American and Amazonian countries against the most orthodox economic, social and political neoliberal views that predominated during the 90s as a reaction due to the policies from Washington Consensus which underpinned the extractivist role of those countries. This group of different perspectives (from ecosocialism to 'Buen Vivir') in the theoretical realm try to propose different practices and social structures beyond the extractivist model and, therefore, in relation with the metabolism between society and nature as well as the way that it is produced. Despite their alternative horizons, these projects have received in recent years numerous critics due to the lack of success regarding the proposed goals and because of the reproduction of former neoliberal patterns. They may have taken place due to several structural factors from the global scale of the world-ecology insofar a expansion period which happened made possible higher trading volumes for cheaper food and energy resources through higher rates of exploitation of local labor force for the transference of the obtained surplus value from the periphery to the center for its growth (and therefore for accumulation process) but not for the shift of the concrete reproduction conditions there beyond the obtention of significant rents from it. Through it the metabolic rift has been deepened generating higher labor and social inequalities between Latin American countryside and cities, the intensification of unpaid home labor for making possible the social reproduction, the expansion of new systems for oil, gas and mineral extraction for improving their processing and increasing profits; the intensification of new crop technologies for harvesting new species with industrial uses (soy beans, oilseeds, palm oil tree and so on); the development of new communication networks (such as IIRSA) for space production, the reduction of circulation times of commodities and the regional integration, etc. However, meanwhile, as an expression of the antithesis of this process of value material production/expansion, it has also taken place another process of immaterial value production through financialization. One kind of this financialization has been implemented by means of accumulation by conservation/fictitious conservation practices. Thanks to them new unpaid labor forces from indigenus people have been integrated for making possible several types of environmental services (e.g. REDD+ programme) that in the long term allow a continuous obtention of cheaper nature and a reinvestment of surplus generated during the expansion period. Therefore, in this context, considering all these facts and variables, this work aims two goals. On the one hand, it tries to explain from world-ecology gaze the possible reasons that did not allow the relative success of those productive models due to structural roots (higher rates of exploitation in extractive labor, intensification of unpaid labor in reproduction and conservation realm, deepening in metabolic rift, etc.). On the other hand, it seeks to connect theoretically the local changes that have occurred in the web of life of the Amazonian space during these decades with the local scale of the world-ecology system.

Keywords: Extractivism, Conservation, Unpaid work/Rate of exploitation, Amazon

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Sudeep Budhaditya Deb

Divisional Manager, Darjeeling Forest Corporation Division, West Bengal Forest Development Corporation Ltd.

“Natural Resources, Participation and Communities: An Hypothesized Framework for a Change Hierarchy”

Participatory Forest (or broadly, natural resource) management is a stakeholder-oriented participatory approach against some accruable benefits. A study of some select participatory natural resource management regimes indicate that motivational drivers necessary to sustain stakeholder interest in such, changes with time following a sequential hierarchy of hardship avoidance, tangible benefits, empowerment, intangibles and pure volition. This hierarchic progression however is in no way unidirectional, but can be both progressive and retrogressive simultaneously depending upon the impacts from varied external stimuli. The proposed hierarchy evolves each time through these impact stabilizations and in the process becomes adept to wider range of socio-cultural, etc. parameters. Based upon these observations a hypothesized framework is being posited to understand this change dynamics better. In the long run, propositions made herein are posited to have wider significances that may even be applicable in the peoples’ participatory dimensions in spontaneous social activism, social movements or social uprisings in the arena of conservation and restoration of natural resources

Keywords: Participatory Forest Management,, participation,, motivational drivers,, hierarchic progression,

Ben M Debney

Doctoral Candidate, History, Western Sydney University

“Othering and performativity as key enabling features of fossil extractivism”

Othering, or the construction ideologically of an exclusionary, self-vs-other binary for purposes of demonising and scapegoating, is established as a key feature of colonialist and imperialist discourse. Edward Saïd pioneered Othering Studies in the 1970s with his eponymous work on Orientalism; in addition to interrogating the Othering associated with colonialism, this seminal work also laid the foundation for further investigation into the relationship between Othering and the hegemonic fossil extractivist ideology of laissez-faire capitalism, whose endless growth paradigm, characteristic Society vs. Nature binary relationship with historical natures and systemic dependence on Cheap Natures created ideal conditions for the emergence of the climate emergency. This relationship is evident in colonialist notions like the ‘civilising mission,’ that sought to open up new commodity frontiers as sources of free and cheap inputs associated with primitive accumulation in the name of saving the people in the way from themselves.

Discourses such as the ‘civilising mission’ are of particular interest also insofar as they have formed the foundation for a performative dynamic—insofar as, in other words, the prior assumptions and thought experiments that characterise them are embedded in the social relations of which they are a part, despite having no empirical foundation. This talk will argue that this is entirely consistent with an extractivist economy based on the commodity relation, one where the exact same performative relation is expressed in the form of money, which is only coloured pieces of paper but for the value

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we invest in it. It will explore how an extractivist economy built historically on colonial violence on the one hand, and Othering and blaming of the victims as ‘savages’ and ‘heathens’ on the other, uses this performative mechanism to definite itself negatively, in opposition to something else, while

1. Continuing to act like the planet is an infinite resource and infinite garbage dump;
2. Treating workers, women, peoples of the Global South, the flora and fauna and the planet itself as objects valuable only for exploitation, as features of Civilizing Projects and the capitalogenic trinity of the climate class divide climate apartheid and climate patriarchy;
3. Dodging the consequences of the above, and
4. Perpetuating class warfare through phenomena like the imposition of work.

Keywords: Othering, Extractivism, Orientalism, Performativity

Kristina Dietz

Full Professor, Development Studies, Political Science, University of Vienna

Co-authors: **Bettina Engels** and **Oliver Pye**

“Labour Agency in the World-Ecology of Palm Oil: A Comparative Perspective.”

This paper analyses the expanding palm oil commodity frontier in Latin America, Africa and Asia as part of a “global ecological fix” based on the “dialectic of plunder and productivity” (Moore 2015). We argue that the uniformity of the co-production system of non-human and human nature (i.e. monoculture plantations, mills, division of labour) stems from the abstract, structural logical of globalised capital. Against this, we discuss the subjective agency of palm oil workers and its emancipatory potential. Rather than based on “non-paid work outside the commodity system”, we argue that the profitability and “cheapness” of palm oil is derived mainly from the rate of exploitation of wage-labour. Whilst labour regimes in palm oil production show structural similarities, in part shaped by the materiality of the oil palm itself, they also differ in the amount and forms of extra-economic coercion and repression. Subjective agency, i.e. everyday resistance and the ability of workers to organise collectively, show similar patterns of commonalities and difference. Whilst the economic structures create similar challenges to and potential for collective action, the respective specific context of political repression and labour history as a co-produced history is crucial for understanding the challenges faced by palm oil workers in different countries today.

Keywords: Labour, Palmoil, World Ecology, struggles

Johannes Dittmann

Doctoral Candidate, Geography, University of Bonn

“Transboundary conservation governance, commodification of nature, and new forms of sovereignty in Namibia”

The ‘transfrontier conservation’ paradigm increasingly finds its way into environmental policies and programs of international institutions and national governments. Being part of green economy visions for Sub-Saharan Africa, transfrontier conservation areas (TFCAs) are heavily promoted as they promise a triple-win promise for nature conservation, economic growth and peace building.

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However this promise must be seen as a political strategy to legitimize TFCAs as apolitical instruments of the market that aim to commodify „natural“ objects, landscapes and imaginations of Africa.

Hence, questions arise concerning the relationship between transboundary initiatives, the commodification of nature, and issues of national governance and policy. This paper takes the example of the Kavango-Zambezi-Transfrontier-Conservation Area (KAZA) to scrutinize how transfrontier conservation goes along with a commodification of nature, new forms of regional governance, and a transformation of political authority.

It argues firstly that the commodification of nature in the cross-border setting of TFCAs does have immediate consequences for environmental governance at national and international scale through a reconfiguration of territoriality and state sovereignty. To understand these new dynamics, the concept of sovereignty has to be disentangled from its previous fixed, spatial association.

Sovereignty in KAZA emerges from participating in a transnational conservation initiative in which various governmental actors, funding organizations, and consulting agencies are involved who continuously enhance and contest sovereignty at different scales, making it a nested or graduated phenomenon. In this case, graduated sovereignty is the result of contested types of differential governmentalities in a highly complex mega-project.

Secondly, the paper illustrates how the establishment of new forms of political authority and the commodification of nature are mutually dependent on each other in a transboundary conservation regime. By conceiving TFCAs as instruments of the market, the commodification of nature instigates graduated forms of sovereignty through the transnationalization of borders, states and territories. Graduated sovereignty results in an extension of eco-governmental control in KAZA, and it contributes to the reinforcement of the commodification of nature by promoting a new wildlife economy in Southern Africa.

Keywords: transboundary conservation, politics, sovereignty, commodification

E

Anne Engelhardt

Doctoral Candidate, Political Science, Kassel University

“Cheap Logistics and the metabolic rift in the social reproduction of labouring bodies at choke points – the case of port labour in Lisbon and Santos”

Raj Patel and Jason Moore state in their book 'A history of the world in seven cheap things' that the 'Capitalocene' requires 'cheapness' as a "set of strategies" to accumulate capital. The constant process of technological development produces and needs 'cheapness' of food, energy, work, care, money, nature, and lives, while also reshaping the corporal organisation of labour and labour reproduction. However, this also requires cheap logistics and constant restructuring and advancement of the global value chain management. Logistics as the line between m-c-m' allows the metabolism of capital accumulation to reproduce. The term 'metabolism' has been primarily employed in Marxist-ecological debates and in Feminist discourses to circumscribe the human-nature, spatio-temporal relations in capitalism. This chapter necessitates its implementation into the critical political economy and geography of labour relations via the focus on the metabolism in the reproduction of the labouring body. In the works of Foster, Ferguson, Moore and others, the labouring body is analysed as a result of different processes such as capital accumulation and social reproduction. The

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chapter argues that the labouring body has to be recentred in the social reproduction theory using the metabolic rift as a concept that tackles the consequences of over-exploitation. Reframing a lack of health and safety and social reproduction as a risk of a metabolic rift helps stress the issue's urgency for labouring bodies. I will use the concept for transport workers at the choke points – here, ports in Brazil and Portugal to stress their specific labour conditions and forms of resistance.

Keywords: cheapness, metabolic rift, critical logistics, labouring bodies

Bettina Engels

Associate Professor, Political and Social Sciences, Freie Universität Berlin

Co-Authors: **Kristina Dietz** and **Oliver Pye**

“Labour Agency in the World-Ecology of Palm Oil: A Comparative Perspective.”

This paper analyses the expanding palm oil commodity frontier in Latin America, Africa and Asia as part of a “global ecological fix” based on the “dialectic of plunder and productivity” (Moore 2015). We argue that the uniformity of the co-production system of non-human and human nature (i.e. monoculture plantations, mills, division of labour) stems from the abstract, structural logic of globalised capital. Against this, we discuss the subjective agency of palm oil workers and its emancipatory potential. Rather than based on “non-paid work outside the commodity system”, we argue that the profitability and “cheapness” of palm oil is derived mainly from the rate of exploitation of wage-labour. Whilst labour regimes in palm oil production show structural similarities, in part shaped by the materiality of the oil palm itself, they also differ in the amount and forms of extra-economic coercion and repression. Subjective agency, i.e. everyday resistance and the ability of workers to organise collectively, show similar patterns of commonalities and difference. Whilst the economic structures create similar challenges to and potential for collective action, the respective specific context of political repression and labour history as a co-produced history is crucial for understanding the challenges faced by palm oil workers in different countries today.

Keywords: Palm Oil, Labour, Commodity Frontier, struggles

F

Anthony Paul Farley

Full Professor, Law, Albany Law School

Plenary Speaker: Thursday, June 9, 11:00

“Bread & Roses”

Slavery is the alpha and omega of the Capitalocene. The first accumulations of capital were, as Marx noted, bathed in blood and covered with dirt. We are still bathed in the blood and dirt of the unimaginable murders of the original accumulation: “...the conversion of Africa into a commercial hunting ground for the gathering of black skins.” Slavery is death, death only, and that continually. We are the dead. Death is the end, and nothing comes after the end save repetition. “A rose is a rose is a rose is a rose,” unless, of course, we suppose that another story is possible. I will tell the story of

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law's role in the repetitions, and I will tell of another world, a world beyond this death that capitalism forever repeats, a world I will describe in the language of flowers.

Keywords: Marx, Anarchism, Primitive Accumulation, Marxist Legal Theory

Mariano Féliz

Researcher, Political Economy, CIG-IdIHCS/CONICET-UNLP / IRGAC-Rosa Luxemburg Stiftung

“Dependency, value and world-ecology Theoretical reflections from recent Argentina’s experience”

Latin America’s dependency has always been tied to its place in the international division of labour. This position has created a structural ratio of unequal exchange with the core, imperialist capitalist economies. Marxian dependency theory (MDT) has explained how this process produces and reproduces super-exploitation of labour as the basis for the continual reproduction of dependency. This has meant the systemic expansion of the frontiers of capital (commodity frontiers) within dependent territories in at least two dimensions. On the one hand, the frontiers within the exploitation of labour, increasingly multiplying forms of superexploitation of productive and reproductive labour. On the other, the expansion of capital into new frontiers for the appropriation of nature, displacing traditional communities and/or integrating existing territories into its global flows.

In recent years, there has been a renewed debate within MDT and there have been efforts to produce a new synthesis with Marxian ecology, Marxian feminist economics, and world-ecology. This article will try to present the debate in an attempt to unravel some of these issues, making theoretical arguments to be illustrated by what’s happening in Argentina in recent years in the midst of a green neodevelopmentalist era.

Taking into account the case of Argentina in the last 20 years, we will show how unequal exchange and ground rent are tied with the processes of super-exploitation of (paid) labour but also the super-exploitation of common goods (usually understood as ‘plundering’ or ‘saqueo’) and of unpaid labour (work in reproductive and care work). Besides, we will explain how current tendencies in transnationalization of capital and labour are transforming the nature and form of multiple super-exploitation in Argentina. In this regard, we will concentrate especially, in current struggles against the integration of the country as supplier of commodities for the production, storage and consumption of energy (shale gas-oil, lithium, ‘green’ h₂o, soja).

We will show how dependency is reproduced at a greater scale on these bases? What is the actual role of reproductive and care work within the process of superexploitation of labour in Argentina? How does this articulation alter traditional readings of value-theory within MDT? What is the articulation of new forms of nature’s expropriation in Argentina with the current global (capitalist) ecological transition? Does this create new forms of value and nature’s unequal exchange in Argentina’s territory? How can current struggles against nature and labour superexploitation in Argentina be understood within the transformation of the global socio-ecological paradigm?

Keywords: dependency, unequal-exchange, crisis, feminist economics

Fringe!

Plenary Special Event: "Pathos by Fringe"

Actor **Harald Redmer** and musician **Helmut Buntjer** show excerpts from their program *PATHOS*, especially extended for the occasion of the **World-Ecology Research Network** conference at Bonn University. They illuminate the big questions of sustainability, justice, and solidarity full of intention and with great feeling.

Pathos - central concept of occidental intellectual history - encompasses exciting things: Joy, anger, love, hate, fear, pity, shame, jealousy, happiness, envy. With text, video and music, the DJ lecture-performance is dedicated to the "good" moments of great feelings, the connection between collective and individual experience, the experiences and events that have deeply engraved themselves in the individual emotional memory. (Westphalian News)

Event in cooperation with the fringe ensemble from Bonn

G

Franco Galdini

Lecturer, Politics, The University of Manchester

"Vulnerability and Resistance in the Age of Climate Change: (National) Food Production vs (Global) Capital Accumulation in Uzbekistan"

This paper problematises the literature's view of climate change in the former Soviet Union (FSU) as the outcome of an incomplete 'transition' to an ideal-type free-market capitalism. Instead, I use the case study of Uzbekistan to argue that the effects of the climate crisis in the FSU republics are directly linked to their integration into the global economy as raw material exporters. The paper's engagement with world-ecology is two-fold. First, I start from Moore's (2017: 608) key insight that 'capitalism's environment-making passed a new quantity-quality threshold ... yet again in recent decades'. Second, I present a theoretical framework developed by Iñigo Carrera (2013) and the scholars affiliated to the Centre for Research as Practical Criticism (CICP) in Buenos Aires, Argentina, that contributes to explaining the material basis behind this threshold passing, starting from the accumulation of capital on a world scale evident in the globalisation of large-scale industrial production. This is key to (global) capital's ongoing exploitation of human and extra-human natures in line with the incorporation of (national) states into the International Division of Labour (IDL). For resource-rich countries of the Global South, integration into the IDL as primary commodity exporters has entailed the mass expulsion of the rural population from the land (primitive accumulation) to put it to use for the production of raw materials for export in line with global solvent demand. This has been the case in Uzbekistan, where access to land after independence in 1991 was privatised to secure raw material rents from export, which went to subsidise capital accumulation in the country particularly via import-substitution industrialisation. The ensuing rise of a vast surplus population expelled from the land and struggling to survive amid precarity and (mostly male) migration had gender-differentiated effects, as 'left behind' women swelled informal labour

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markets, while tending to subsistence agriculture in family plots. Since raw material production for export continues depleting resources vital to food production, women have simultaneously been more vulnerable to climate change and leading everyday resistance to it via worksharing and agroecology. However, as Uzbekistan and the donor community deploy techno-managerial 'solutions' to the climate crisis that integrate women's survival strategies while allowing for the intensification of primary commodity production, in line with global solvent demand, this holds the potential of precipitating a reproduction crisis for the surplus population.

Iñigo Carrera, J. 2013. *Capital: Historical Reason, Revolutionary Subject and Consciousness*. Second edition. Buenos Aires: Imago Mundi. [El capital: Razón histórica, sujeto revolucionario y conciencia].

Moore, J. W. 2017. 'The Capitalocene Part I: on the nature and origins of our ecological crisis', *The Journal of Peasant Studies* 44:3, 594-630.

Keywords: food production, capital accumulation, climate change, Uzbekistan

Gloria Luisa Gallardo Fernández

Full Professor, School of Natural Sciences, Technology and Environmental Studies, Södertörn University

Plenary Speaker: Wednesday, June 8, 15:30-17:00

"Dispossessions and the Making of Cheap Natures: Cuncumén community and the Los Pelambres copper corporation in Chile"

Capital's demand for cheap mineral resources around the world creates socio-ecological problems for the communities located at the extraction sites, as well as for the country and the international market. Chile – the copper frontier – (Moore 2015), is a case where mining continues to be the backbone of the economy. Since the early 1980s, mining, through land and water dispossession, as pre-requisite to operate, reorganized nature in the province of Choapa, , with Cuncumén being the first community most directly affected. When the mining of copper by Minera Los Pelambres (MLP) started in the 1990s, and the environmental effects of mining begin to be noticed, social protests also begin. MLP, supported by law enforcement when necessary, first countered by putting out fires through bilateral negotiations with community leaders, leading MLP to play an increasingly important role in local development initiatives; a corporate social responsibility (SCR) strategy that coincides with the high prices of copper in the international market. The fall in market prices, added to the growing proliferation and dispersion of local agreements, leads MPL to change its strategy for a Social License to Operate (SLO) strategy, focused on supposedly collective goals of the communities, built on a public-private partnership with co-financing from regional institutions and the state to enhance cooperation for territorial development. In the change of strategy also played a role the national and international repercussion caused by the profound and prolonged legal dispute and conflict over MLP's El Mauro tailings dam in the Caimanes community.

The repeated expansions of mining operations and strategies of the MLP have continue to deepen the (re)configuration of world-ecological relations through amplifying the construction of large-scale infrastructure such as toxic mining tailings, roads, pipelines, ports, power lines, among others. More significantly, the result of MLP's strategies is the growth of a widespread and mutual social mistrust in the whole valley that is difficult to repair. This presentation traces the consolidation of land tenure, the history of 'glocal' mining and the hegemony of capital through economic, state and ideological means, conceptually analysed through Leiva (2017) who states that "The New Spirit of

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Capital' in the periphery, to counteract the growing social protests, uses three fundamental elements for its valorisation: the production of ideas, rules and subjectivities. This is a story about the strategies of the powerful who seek control over the reorganization of the web of life in the service of capital accumulation. The story is as old as capitalism, although the human and non-human natures differ according to the time and space in which these processes take place. A case study approach was used to generate perceptions about the origin and proliferation of conflicts related to mining in the province of Choapa, through a series of semi-structured interviews with some of the main social actors involved, to whom we give voices.

Keywords: copper mining, dispossession of natural resources, reorganization of natures, conflicts.

Paul K. Gellert

Associate Professor, Sociology, University of Tennessee

“China’s rising power as seen through the world-ecology of palm and dairy”

We are living in a period of turmoil and uncertainty about the present structure and future direction of the world-economy, but evidence is emerging of an Asia-centered world economy with China as its hegemonic power. This paper proposes to examine this possibility through a world-ecological perspective on the intertwined commodity frontiers of palm oil in Southeast Asia (Indonesia and Malaysia) and dairy in New Zealand. The accumulation strategies and the socioecological relations of land and water degradation of these two semi-peripheral regions have become intertwined in the last decade. Palm kernel expeller (PKE), a “waste” by-product of palm kernel processing, was introduced for animal feed in the grass-fed system of New Zealand. The growth of these two frontiers depends on strategies of land-based extensification and agro-technical intensification. There is more extensification in the palm frontier and more intensification in the dairy frontier. Due to growth, as well as urbanization, middle class consumption, and dietary change, China has become one of two leading markets (with India) for palm oil and the absolute lead market for New Zealand’s export-oriented dairy sector. In order to profit from this trade, private and state-owned firms from China have begun to acquire ownership stakes. This paper explores these complex social, political, economic, and ecological relations in the semiperiphery of the world-system as they are shaped by and productive of China’s rising hegemonic power in the Asian region and the world.

Keywords: dairy, palm oil, semiperiphery, China

Soumitra Ghosh

Activist

“Work, self-work and the making of oppositionality”

This paper/presentation wants to explore how the intertwined concept of work/workers/labour can and should be understood in distinct separation from what the young Marx and Engels called self-work, because without doing so a radical politics of work and working class cannot be re-imagined. Without such an imaginary neither could the dialectic of accumulation by appropriation and capitalization be effectively challenged, nor the centrality of the labour process as socio-ecological metabolism and class struggles in the web of life be posited. This paper therefore argues that a conscious, informed and organised desire to reclaim the freedom for self-work as opposed to

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work/labour within the State-Capital hegemony constitutes the core of the oppositional knowledge, only which fully realises the emancipatory potential in the labour-capital dialectic, thus making the construct of working class as an revolutionary entity possible.

This paper posits and evolves through several key propositions. One, as has been substantively and numerously argued already in the ongoing world-ecology conversations, the web of life today is in actuality a web of capital, both in its epistemological framework and empirical manifestations. We propose to extend this idea by trying to relocate both historical and living labour in this web, including forms of unpaid work. Thus, our second proposition would be to establish labour as the fountainhead of resistance against all forms of ecological and social tyranny, colonialism and imperialism, which we try to do by reimagining labour-as-resistance as also labour-as-self-work. Our third proposition is that our failure to do so would only help perpetuate the capitalocene; we argue that unless the worldwide movements against extractivism, racism, patriarchy and climate injustice reinvent themselves as oppositional entities endowed with this key oppositional knowledge, the much-needed rupture in our capital-driven scheme of things won't happen.

We propose further that oppositional knowledge can only be conceived in context of the present-day movements as political continuities: made up in equal parts of memories and critical evaluation of the past class struggles, actual-physical-organisational engagement in today's radical mobilisations and a desire to smash and transcend the hegemonic capitalist real for an emancipatory future, such knowledge must inform our conversations and mobilisations. Otherwise, even the very real threat of climate change and the pandemic won't force the rule of Capital to collapse anytime soon; instead, by using simultaneously the military powers of the State as well as private militias and the new digital technology, more new enclosures would be created and the historical process of colonization and extraction would continue with enhanced intensity, thus extending the age of imperialism.

It is thus more than necessary to come out of the rut that fetishistic mechanical readings of historical materialism produce and engage in organisational processes that foreground oppositionality by rejecting the State-Capital epistemological framework in its entirety. As today's capitalist real continually encloses the essentially oppositional understanding of state, invading and usurping the non-state dynamics of social movements by various new instruments such as the digital platforms and social media, the boundaries between work and self-work seem to disappear. We argue that in an era of Facebook and Twitter revolutions, capital effectively commodifies insurrections and sometimes the entire process of anti-capitalist organising. Movements-as-events and movement-as-spectacles might be part of the new digital ecology that supports the new digital commons—but that ecology itself is rooted in Capital. We also posit that the apparently radical ideas of Degrowth and Green New Deal have to be situated outside the State-Capital epistemology to render them effective—unless we collectively know that the state can no longer contain and rationalise the production and reproduction of capital, and think of non-state non-capital spaces where new ideas can be put to practice, such ideas are mere words.

Unless we try to evaluate the ongoing anti-capitalist movements as oppositional political continuities that stretch across space-time, and in terms of actual organising and organisation, we would fail to understand whether these movements are capable of transcending their physical and political boundaries.

Keywords: Anti-capitalist, Organising, Work, self-work

Diana C. Gildea

Doctoral Candidate, Geography, Lund University
WERN 2022 Conference Organizer

“We are Family! Social Reproduction and Cheap Enough Labor in the Southern Tier 1900-1930.”

In this presentation, I analyze various publications, to reveal the ways in which George F. Johnson, industrialist and owner of EJ Shoes, produced and reproduced an ideology around the connections between work, family, women, and their children. This project was gendered, racialized. This strategy was centered upon the creation and strength of a tiered strata of worker families at the local level, and built upon the project of Americanization at the national.

Trish Marjory Paida Gombe

Researcher, Research, Geo Planet Key Consultancy

“Profit versus environmentalism: A study of policies and institutional framework affecting wetland management and conservation in Harare, 2000-2017”

This article investigate and analyze policies and institutional frameworks affecting the management and wetland conservation, trace the debates between capital and environmentalists and answer the question of whether economic development and environment protection are compatible in Zimbabwe using Harare, the capital city of Zimbabwe (member of the Ramsar Convention on Wetlands) as a case study. A mixed research methodology, comprising review of literature, interviews and document analysis forms the key methodology used in this study. The research made two important findings. Firstly, wetlands in Harare have been severely degraded by anthropogenic activities, with housing and commercial development as the major contributors to this degradation. Secondly, the research found that wetland degradation is closely linked to a lack of clear and harmonized policies and institutional framework both at national and local level which is caused by overlapping roles and functions among the various institutions and legislations. The study concludes that clear boundaries and harmonization of key policies and institutional arrangements is needed to promote the sustainability of wetlands in Harare.

Keywords: Institutional framework, Wetland Governance, Wetland Management, Conservation

Andrej Grubačić

Plenary Special Event: *“Climate Justice & Labour in the Capitalocene: A Discussion”*

Full Professor, Anthropology, California Institute of Integral Studies
WERN 2022 Conference Organizer

Emancipatory politics of world-ecology.

Keywords: praxis, revolution, ecology, work

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H

John Havard

Associate Professor, English, Binghamton University

“Luddites: Global Cotton, and Cheap Lives.”

This paper will revisit the early nineteenth-century "Luddite" protests through a world-ecological paradigm. E.P. Thompson and Eric Hobsbawm tied the Luddites' work-stoppage and property destructions to traditions of agricultural protest and radical politics in England. By returning to writings by and about the Luddites, I will show that they also understood their protests in relation to a capitalist world-system, tying their actions to enforced (racialized) labor and expropriation in the Indian subcontinent—and, in turn, the plantation economies of the United States. In conclusion, I will ask how this buried genealogy reframes modern day "Luddism" not as stubborn philistinism vis-à-vis "new technology" but as resistance to the cheapening of lives by modern capitalism and its claiming of the global commons.

Keywords: Cotton, Labor Protest, Plantation, Luddites

Margaretha A Haughwout

Assistant Professor, Art, Colgate University

Plenary Speaker: Friday, June 10, 15:00-17:00

Co-author: **Oliver Kellhammer**

“Ruderal Witchcraft Manifesto”

This essay introduces the concept of *ruderal witchcraft*, laying down a theoretical groundwork, and outlining the stakes involved for a set of practices specific to planetary, weedy natures that work their way at edges and interstices of public and private property, and which are entangled with a range of other human and non-human outcasts of capitalist modernity.

Ruderal ecologies emerge in sites of human disturbance. They emerge in rubble, ruins, in waste spaces. Ruderal ecologies make use of all possibilities for transportation that the 21-st century can offer, quickly reproducing, rapidly spreading seed, breaking up or binding together soils, offering nutrients, and playing host to insects and other outcasts of modernity. Importantly, ruderal landscapes are landscapes of the poor and working classes, of the landless proletariat; they are spaces where nature has been cheapened, and then abandoned. Witches, too, are ruderal. Like many ruderal plant and animal species, witches are cast out or devalued with ongoing enclosure movements; they are left to haunt the periphery, perhaps sharing spells that propagate through GIF-riddled websites. Like their weedy familiars, witches poison and heal. Ruderal ecologies, brownfields, post-industrial wastelands, the ‘blasted heaths’ left behind after capitalism digests and excretes the living landscape, are witchy haunts. Overlooked, interstitial and yet ubiquitous, these spaces enable sorcery and rough, nascent commons.

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The end of European Feudalism was brought about by the climate event of the Little Ice Age, the Black Death, and by persistent peasant organizing in commoning environments across Europe. Silvia Federici demonstrates how feminized bodies were often central to this organizing. They were skilled in the use of plants and worked with natural cycles that shaped celebrations, harvests, and divination processes. Old women often held the memory of negotiations around land and resource use; if capitalism was to take hold, these so-named witches would need to be removed. Federici tracks how the demonization and extermination of witches in Europe not only produces the docile white woman, the accumulated female body, but also becomes the template for the accumulation, exploitation, and genocide of colonized subjects across the European colonies. Witches have been relegated to the periphery of property, forced to ply their craft in wastelands and burned-out heaths, in the unwanted remains of multispecies commons, in the ruderal spaces, the in-between spaces of care and non-care. The very ruins most of us wish to evade hold this history, waiting to be noticed, waiting for us to reckon with weeds, toxins, boulders, violence.

This manifesto describes how ruderal witchcraft practices prioritize relationship over individual species; involve (partial, contingent, and relational) healing, (re)mediation, and danger; include sorcery: invocation, and conjuring; include seasonal observations, ritual, and ceremony; often require horizontal organizing and governance strategies; and engage practices of timecraft such as fortune telling, hauntology and necromancy. Through these practices, ruderal witchcraft is key to reviving the commons, understood by Peter Linebaugh as resilient spaces of "cooperative labor, common resources, and communal distribution." Active relationships with weedy, rapidly reproducing species that primarily operate in everyday spaces of disturbance give guerrilla gardeners, activists, homeless, artists, witches, and other practitioners concerned with the ongoing threats of the global Capitalocene new spatiotemporal opportunities for anti-capitalist magic, sabotage, and retreat.

Keywords: weeds, witches, disturbance, tactical

Chelsea A Heikes

Artist, Philosophy, Art, and Social Thought, European Graduate School

"Hydro-Ecologies/Hydro-Economics: Putting Water to Work"

Multiple systems entangle and pulsate within world ecology. This paper looks specifically at the systems of hydro-ecologies and hydro-economics, expanding the general term "hydrosphere" to include all human-induced processes. Human-induced processes siphon and put water to work. After setting up my initial definitions of this system, I will look critically at water as laborer in both industrial and artistic projects.

Keywords: hydro-ecologies, hydro-economics, art labor, water labor

J

Jacob Omar Jerónimo

Plenary Special Event: *"Climate Justice & Labour in the Capitalocene: A Discussion"*

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Omar, a Ch'orti' Maya, is an activist dedicated to indigenous and peasant proposals for restoring and/or generating life giving practices and relations in all aspects of the web of life. He is co-founder of the Union of Maya Ch'orti' Indigenous Organizations, Nuevo Día (2002), and more in the Ch'orti' territory of eastern Guatemala bordering with Honduras.

K

Julia Kaiser

Plenary Special Event: *“Climate Justice & Labour in the Capitalocene: A Discussion”*

Activist, Sociology, FSU Jena

“Climate movement and trade unions hand-in-hand: The TV N 2020 campaign by ver.di and FFF in the local transport sector”

In the TV N 2020 campaign, climate activists and public transport workers fought together for better working conditions and an expansion of public transport. The campaign was the result of strategic thinking by climate activists: The climate movement can only build real power if it works together with wage earners and their unions. If it does not do so, there is a risk of increasing social division and, moreover, an important weapon is missing: the strike for the climate at the workplace. The lecture will theoretically illuminate why a "labour turn" (Pye) of the climate movement is necessary and describe how this can look like in practice.

Keywords: labour turn, fridays for future, working-class ecology, public transport

Leonie Kirchhoff

Researcher, English Literature, Independent

Co-author: Curtis Runstedler

““Advantageous to Life” – Isolation and Ecology in Shakespeare’s The Tempest and Owen’s Where the Crawdads Sing”

Shakespeare’s The Tempest can be read as an ecocritical text. As a result of the play’s interest in issues, such as ecological sustainability, we argue that it is possible to distinguish three kinds of world views in Shakespeare’s play which reflect the opposing interests and values that also shape the discussions concerning the future of our planet: Prospero’s capitalist rule of the island, Gonzalo’s dream of a Marxist utopia, and Caliban’s anarchic behaviour are intricately connected to their attitude towards nature and the microcosmic world of their desolate island. Moreover, we argue that this initial analysis can be used to discuss modern ecocritical texts, such as Delia Owen’s Where the Crawdads Sing. This novel parallels The Tempest as an isolation narrative, and the protagonist Kya’s complex personality reveals qualities of all three character types. The question we aim to answer is therefore whether Kya’s character and character development offers a way of negotiation between these conflicting ideas.

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In our paper, we will present an analysis of the three types in *The Tempest* and demonstrate how these are shown in Kya's interaction with other humans as well as in her exceptional relationship with her rich natural environment. The analysis, however, reveals her character as problematic. In fact, the extreme views and reactions to the world found in the characters Prospero, Gonzales, and Caliban in *The Tempest* can be read as contributing to the intricacies of Kya's character. Therefore, despite her heroic struggle against adversities and her understandable desire to be loved, she is an irregular heroine whose decisions and actions disqualify her from becoming a member of society. This statement is further supported by the fact that she is eventually revealed as the murderess of Chase, her ex-lover and later sexual assailant, which creates mixed emotions about her character. We thus suggest that rather than offering an answer, the novel ultimately leaves us with the question where we as readers and as a society see ourselves in relation to this complex triangle. In this presentation, we aim to illuminate the parallels between the two isolation narratives. In light of world-ecology, *The Tempest* establishes a foundation for better understanding contemporary concerns about humanity's (unruly) natures and ecological impact. Furthermore, its template of three core attitudes towards nature becomes manifest in contemporary fiction, notably *Where the Crawdads Sing*, and thus induces the reader to confront their own social and ecological role.

Keywords: ecocritical texts, isolation narratives, English literature, early modern texts

Michael Kleinod

Postdoctoral researcher, Global South Studies Center, University of Koeln
WERN 2022 Conference Organizer

“Optic nerve dilemmas, habitus-habitats and recreational frontiers: towards a ‘world-ecological praxeology’.”

In these times of capital breakdown, visions and designs of alternatives abound while the multiple crisis worsens unabatedly. One aspect of a solution to this dilemma is the need to first of all fully appreciate the encompassing and thoroughgoing ways in which the environments, bodies and things of this world are constituted by capital. Only an unsparing, decidedly capital-centric account of how everyone and everything is shaped through and through by what is to be overcome will provide the grounds for efficient transformation.

For such an account, world-ecology's vast historical and geographical scope is certainly one indispensable ingredient. However, it is precisely this optic that comes with a crucial (and admitted) blind spot that is as necessary and systemic as the one attached to the eye's optic nerve; namely, practice. For, how exactly world-eco's wisdom translates onto the “meso and micro levels” is still up for grabs. But in the final picture, capital, its crises as well as its potential overcoming are a matter of the doing of real existing individuals in their socio-ecological makeup and relations. This is where Bourdieusian praxeology comes in, the aim of which is exactly to delineate how “capital” is socio-structurally refracted into various forms and aggregate states to become reproduced in practice. However, its systemic, classical sociological blind spot is “nature”, human and nonhuman. Another necessary blind spot of both, world-eco and Bourdieu, appears to be that of a transformative horizon as integral to the respective theory. Enter Frankfurt School: even though Adorno & others arrived at an impracticable pessimism, the “negative dialectical” optic that conceives of nature as “non-identity” principally allows for the consistent integration of “utopia” into the theoretical design – while its peculiar blind spot lies, again, in a sociologically rigorous notion of capital as structured-

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structuring practice.

This talk seeks to make inroads into conceptual synthesis along those lines. It builds on, and provides examples from, previous research; e.g. on ecotourism as a world-ecological, socially structured practice which exploits the non-identical drive for “ecorational instrumentality”, making the reproduction of human natures in capitalist centers – i.e. labor power – serve the (re)production of nonhumans on resource frontiers. In a similar vein, the concept of “habitat” is suggested as a necessary, world-ecological complement to Bourdieusian “habitus”. While such an attempt at synthesis is certainly ridden with many challenges, such as the relation of Marxian and Bourdieusian notions of “capital”, the presentation counts on the generative spirit of the world-ecological conversation to further advance this endeavor.

Vijay Kolinjivadi

Researcher, Institute of Development Policy, University of Antwerp

Co-authors: Diana Vela Almeida, Gert Van Hecken

“Locating the ‘Ecotariat’: towards unchaining ‘green’ supply chain governance”

There is an urgent need to reconceptualize and communicate how ‘green growth’ strategies to achieve so-called “net-zero” emissions and nature conservation tactics ultimately transform landscapes to securitize and expand industrial production. As the world economy continues to grow unevenly, the politics of nature continue to be unhinged from the political economy of production as an ecological process. Attention to uneven visible and invisible reproductive labour patterns along class, gender, and racial lines is a prerequisite to understanding how “greening” global supply chains and other technical fixes puts both human and non-human labour to work in service of new ‘green’ commodities, marketed in ways that respond to the very crises such production logics continuously set into motion. Put differently, the process required in designing and implementing ‘green’ technical fixes cannot be viewed in isolation from how ecological breakdown itself unfolds in practice. Using examples from ‘cleaning’ global value chains for key commodities, this work illustrates how standardization technics of efficiency, calculability, control, and precision are used to violently (re)produce and discipline an ‘ecotariat’ (e.g. human workers and non-human natures) leveraged to manufacture desired “green” solutions through selectively narrated histories that safeguard reputation and minimize risk to investment. We also consider the added production of ‘nature’ through conservation measures promoted in these “cleaner” supply chains as itself a global value chain, inscribed into broader investments for nature conservation with expected economic returns. In the process, cultural knowledge and relationships between people and non-humans is appropriated as a form of unrecognized labour for producing “greener.” By adopting the lens of an ‘ecotariat’ in thinking with and beyond the discipline of plantations, this work aims to reframe ‘greening’ supply chains as putting both human and non-human labor to work in service of commodities that further ecological breakdown. In this way, ‘ecotariat’ offers a cognitive device to collapse false binaries between social and environmental concerns.

Keywords: global value chains, plantationocene, ecotariat, green growth

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Sören Köpke

Postdoctoral researcher/ lecturer, Faculty of Organic Agricultural Sciences, University of Kassel

“Agro-extractivism in Africa: A world-ecology perspective”

Extractivism is the persistent model of development in many if not most African economies (Greco 2020; Bond 2017). This contribution will engage with agro-extractivism as an exploitative regime type prevalent in African countries, and with a specific role in the world-ecology. It relies on the production and export of agricultural raw materials, like cocoa (e.g. Ivory Coast, Ghana), coffee (e.g. Kenya, Ethiopia), vanilla (Madagascar), tea (Kenya, Tanzania), cotton (Burkina Faso, Mali), tobacco (Malawi), sugar (Eswatini), etc. The primary sector employs the majority of labour in many African countries, however, low producer prices, volatile world markets and frequent climate disaster threaten livelihoods of small-scale producers. While the exposed role of African regions in “global land grabbing” (Borras et al. 2011) – or related phenomena of “resource grabs” (McMichael 2013) – has lately reinforced and entrenched the peripheral situation of rural Africans, it is based on historical modes of production.

The colonial appropriation of land resources in the 19th century “scramble for Africa” laid the base for the structure of cash crop production and created enduring legacies. African regions and later countries were assigned a role as primary product exporters for food commodities within the first and second food regime (McMichael 2009). Yet beyond the necessity to provide “cheap food” for the capitalist world-ecology (Patel and Moore 2017), agrarian capitalism in Africa also functioned as a vehicle to incorporate smallholder producers and extra-human natures into capitalist power relations. European rule in 19th and 20th century colonial Africa largely played out differently than earlier in the Latin American and Caribbean colonies, attributing different roles to the peasantry (Bernstein 1979), but also creating different manifestations of ecological imperialism (Crosby 1986; Grove 1995; Mulwafu 2010). Therein, colonial expansion relied largely on the myths of “terra nullius” (Geisler 2012) as empty spaces, and African societies as uncivilized and tribal.

This paper will argue that there is a double character of agro-extractivism in Africa as a specific historic appearance of capitalist accumulation and a form of hierarchical and violent power relation within the web of life. It nowadays emerges in the form of new agribusiness models, GMO crops, and other elements of an “African Green Revolution”, but also tightly interlocks with processes of securisation and militarization. It employs forms of territorialization (Vandergeest & Peluso 1995), allowing the zoning of land into spaces of conservation and production, and hereby facilitating the ongoing extraction of value from African ecologies and labour.

Keywords: agro-extractivism, African peasant agriculture, world-ecology, cheap food

Thomas Kopp

Assistant Professor, Economics, University of Siegen

Plenary Speaker: Thursday, June 9, 11:00

“The Imperial Mode of Living”

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L

Christopher Laumanns

Plenary Special Event: *“Climate Justice & Labour in the Capitalocene: A Discussion”*

Activist, Climate Justice movement, Alle Dörfer Bleiben

Keywords: Climate Justice, Labor, Trade Unions, Coal

Wendy Lynn Lee

Full Professor, Philosophy, Bloomsburg University of Pennsylvania

“Webs of Life and Death in the Kleptocene: Jason Moore’s (unwitting) invitation to the Capitalocene”

Jason Moore gets so much right in his critique of capitalism that it’s almost painful to discover that what he misses results in an undermining distortion of his argument in *Capitalism in the Web of Life* (2015). Yet by disregarding the pivotal role played by the commodification of sentience in the history of capital, Moore misses a crucial element of what defines capital in capitalism, of what drives its historical journey long before the “long sixteenth century.” Moore shares much in common with David Wallace-Wells and Michael Mann, writers who are also deeply concerned with the climate crisis. This includes the willingness to hold capitalism responsible for damage to the planet and its atmosphere. What makes Moore’s work potentially revolutionary as opposed to merely reformist, however, is his resistance to rehabilitative schemes that leave capital chastened but intact, and, sadly, as rapacious as ever. But what delivers Moore’s critique of capital to disappointment is that the historical breadth of his account, his analysis of the ways in which “the manifold projects of capital, empire, and science are busy making Nature with a capital ‘N’—external, controllable, reducible”—all the while “the web of life is busy shuffling about the biological and geological conditions of capitalism’s process,” is not met with an equally compelling account of the ontological conditions that inform “capital,” and thus a view of “Nature” expedient to the objectives of capitalism, (Moore, p. 2-3).

In short, though a leap beyond the reformism of Wallace-Wells and Mann, Moore’s radical aspirations falter on the shoals of what is essentially the same human chauvinism as his fellows. Moore’s key organizing concepts, especially, “extra-human” and the “Four Cheaps,” effectively re-inscribe “Nature” onto nature via the same logic of domination that Moore rightly argues must be dismantled as a bulwark premise to capital’s creation of the “web of life” in its own image, (p. 19). Put differently, Moore’s trenchant historical account is betrayed by the logic that implicitly drives it, leaving in its wake a narrative as distorted by narrow human interest as its capitalist predecessor.

Larry Lohmann

Activist, Undisciplined, The Corner House

“Misrepresenting Climate Change: The Need for a World-Ecological Approach”

Common anticapitalist slogans such as “we need system change, not climate change” can be interpreted in different ways. Acting on these different interpretations will have different consequences. Political movements need to choose which interpretation they want to support. One interpretation goes as follows. Climate action is about reducing net carbon emissions to zero. Capital cannot do this. Therefore climate movements need to be anticapitalist.

Another interpretation takes a different line. This is that climate is not about carbon. The different things that different communities refer to in conversations on climate change are manifestations of a broader capitalist frontier involving the progressive “wearing out” of human and nonhuman beings in the service of accumulating capitalist value, in line with the insights of world-ecology. Therefore climate action cannot be set apart from dialogue about the whole range of already-existing resistance to capitalism on all fronts.

The two interpretations imply completely different types of movement-building and completely different attitudes toward labour exploitation, thermodynamics, extractivism, capitalist fetishism, rural dialogue, race, climatology and political action. For example, when climate-as-carbon is reinterpreted in world-ecological terms as involving labour exploitation through fossil-fuelled mechanization and racialized landscapes of energy conversion and entropy production, different and more inclusive kinds of movement dialogue become possible. Exploring such possibilities more deeply is an urgent task for left climate change movements.

Keywords: climatology, labour, thermodynamics, race

Justin McBrien

Lecturer, History, University of Virginia

“A Violent Storm is Gathering: Extreme Weather, Disaster Dispossession, and The Formation of a Climate Class Consciousness”

Within the history of climate politics, weather disasters have always been the most prominent political flashpoint. Over the course of the past several decades, increasingly virulent strategies of capitalist profit seeking have taken advantage of weather disasters to capitalize on the unprecedented global ecological catastrophe capital is driving. Now, we can conceive of the weaponization of the weather in-itself as a form of class violence and dispossession. Using the lens of World-Ecology analysis, this paper views capitalism’s relationship to extreme weather as one that is co-producing itself and cannot be decoupled—“extreme weather” is not a passive side-effect of the process of fossil capital accumulation, but an active form of accumulation—a double form in that capital accumulation produces the effect of weather disaster, and weather disaster in turn produces the conditions for new extraction of surplus value, which in turn drives the continued production of climate disruption and weather disaster. And yet at the same time, climate ‘resilience’ and ‘adaptation’ also provide an opportunity for accumulation through potential ‘climate gentrification’ and appropriation for ‘green spaces.’ The paper will specifically analyze this problem between weather disaster, sea-level rise, coastal settlement, and catastrophic capital accumulation in the Southeastern U.S and how possession of scientific information about future disasters becomes the

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grounds of a class struggle in its facing direct and visible exploitation in their communities directly due to the relationship between development and disaster planning. The problem then becomes: who produces, controls, and deploys scientific information—maps, models, historical data—that predict for local effects of climate disruption and for what ends.

Keywords: Extreme Weather, Class Consciousness, Climate Science, Disaster Planning

Yoan Molinero Gerbeau

Lecturer, University Institute for Studies on Migration (IUEM), Comillas University

Co-author: **Álvaro San Román**

“Western thought as a determinant predecessor of Capitalism. The Capitalocene as a Westernocene”

In the current debate on the causes, consequences and solutions for the climate crisis, we will argue that the hegemonic discourse of the Anthropocene implies a problematic anthropological, ecological, historical and scientific perspective, as, by reproducing a Cartesian dualist vision, it replicates the ideological schemes that are at the origin of the crisis. Therefore, after exposing the main assumptions of the Anthropocene, we propose to make a critique of them by conversing with other alternative perspectives.

We will however argue that most of these proposals tend to focus on single elements that only gain importance because of the role they play within the capitalist structure as a way of organizing nature, that is, as a world-ecology, which requires assuming a broader historical and structural proposal: the Capitalocene perspective.

In this study, while deepening on the constitutive pillars of the Capitalocene, we aim to analyze an even deeper ideological foundation to highlight that capitalism itself is a material structure built on the ideological foundations of Western thought, whose approach to the predation of nature precedes the Cartesian dualism itself. The objective of this paper will then be to discuss these issues and conclude that it will not be the anthropos, but capitalism, through its Western intellectual foundation, that leads us to a new geological period, the Capitalocene as a Westernocene.

Keywords: capitalocene, westernocene, antropocene, climate change

Jason W. Moore

Full Professor, Binghamton University

Plenary Speaker: June 8, 9:00-10:30

WERN 2022 Conference Organizer

“The Climate Crisis is a Class Struggle: Towards the Proletarocene.”

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N

Rabia Nadir

Associate Professor, Media Studies, Art and Design and Environmental Science and Policy, Lahore School of Economics

Co-authors: **Fizza Batool** (Lecturer and PhD fellow in IDK. University of Augsburg), **Huda Javed** (Doctoral candidate of Human Geography South Asian Institute Heidelberg University), **Munir Ghazanfar** (Professor, Department of Environmental Science and Policy, Lahore School of Economics) **Huma Naeem** (Alumnus Department of Environmental Science and Policy, Lahore School of Economics, currently teacher at Westminster School Dubai).

“Five onslaughts and the final exodus: Women-led rural-urban migration in Pakistani Punjab”

There is a huge influx of poor peasants into the big cities of Pakistan. Most of the incoming families are led by women who take up work as maids in the urban middle class households. Most studies have focused so far on the condition of work, wage and life of these maids in the big cities. This paper focuses on the condition of these families in the village under which they are choosing to migrate. During the land settlement under colonial rule the British deprived some 40 per cent rural people of land including the few who were engaged in crafts. Land being the only means of production in rural areas the landless people became totally dependent on the landlords. They have continued to be so now some 75 years since independence. A small number of people engaged in crafts which afforded them only partial independence because they still remained dependent on the local landed as their market and their source of food. They were called kammi or menial workers. In a second onslaught the British deprived the kammi of their market by introducing large scale industry and imports. In the absence of land and crafts the poor peasants made livestock the mainstay of their independent livelihood. Each family kept one or two animals as source of their food and as their piggy bank. It wasn't the end, however. A third onslaught started in the mid-sixties when the Americans introduced Green Revolution. Hard agricultural labour for harvesting, sowing and weeding was yet another source of poor peasant's income. The violence of Green Revolution has gradually finished that through the use of machines and agrochemicals. Livestock needs feeding: Abundant grazing commons in the rural areas in the past as well as a social contract with the landlords under which as part of their labour for working on landlords lands and looking after his cattle the poor peasant could also feed his one or two animals on landlords lands. With the gradual increase of industrial farming the landlords' dependence on the poor peasant has decreased. The social contract between the landed classes and the landless peasants has broken down. The landlords are not ready to give away any fodder without payment in cash or kind. Keeping animals has become well nigh impossible for the poor peasants. Thus with access to grazing and fodder denied this fourth onslaught is depriving poor peasants of livestock, their mainstay without land. With the breakdown of the social contract even such food sharing as 'lassi' and occasional vegetable, like saag has been withdrawn. Food is no longer a gift it must be paid for by some work in the landlords house. The poor peasants on their part are increasingly hesitant to work in the landlord's house or on his farm without payment. If the peasants is still left with any livestock its milk is now taken away by the multinational milk producers under a sale-purchase deal. This is the fifth onslaught. In the words of migrating maids "it is hunger that is pushing us out". Rapid urbanization, on the other hand, starting towards the end of last century, decrease of family size, and expansion of competitive

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education and such other conditions have created rapid increase in the need for domestic services. With life in village becoming impossible for the poor peasants and the emerging expansion of domestic services in big cities conditions have become ripe for a vast exodus of poor peasants from the rural areas to the big cities. In the poor peasant family it's the women who carry the domestic skills required in the urban household. So the poor peasant exodus to the big cities is led by women. Life in the village at one time had promised stability and a relative equality. It had degraded over the years and was nothing more than illusion now. Maids have arrived in cities with high hopes but the violence of the city is only beginning to unfold. The problems of the people whether in rural or in urban areas are the direct result of the integration of the national economy in the international production system.

Keywords: Maids, Female led migration, Agrarian question, Hunger in rural Pakistani Punjab

Mirko Nikolić

Researcher, Department of Culture and Society (IKOS), Linköping University

“European mining to combat the climate crisis? Challenges from the ”neighbourhood””

Climate action splits Left parties and progressive movements across Europe, broadly marked by two poles: either big investments into ”green industry,” or systemic degrowth and material use reduction. Developed EU economies now implement policies to increase metal mining in the EU, along the continued import from across the world. These plans however encounter staunch opposition around the EU, and also in its ’neighbourhood,’ i.e. ”enlargement” and candidate countries. Focus on these regions sheds light on the dynamics of ’semi-periphery,’ regions deemed to be caught in the ”catching-up” race with the developed centres. Serbia has recently seen a rise of a wave of local movements and translocal coalitions to stop principally lithium mining, one of the iconic materials critical for the “green economy.”

The discourses used by opposition movements and their social structures are markedly complex and hybrid, ranging from indictments of ecological imperialism and (neo)colonialism, government-sponsored land-grabbing, to expressions of commoning and international solidarity. The questions that arise from their activity are highly pertinent, as they seek to find a new space of possibility in the European semi-periphery, caught amidst the shifting relationship between the over-developed and de-developed regions, chasms that may get even more unjust in the light of the “energy transition” led by the rich. By opposing mines, are these movement conservative forces enamoured of consumption with pollution outsourced to the Global South, or are they fighting for climate justice? Are they merely seeking to stop the worst in their backyard, or are they challenging the logics of Cheap Natures subtending the ongoing biodiversity and ecological crises?

Challenging the mining hegemony, deeply rooted in the region’s history, thus becomes no less than an ontological challenge with still to be understood implications. World-ecological analysis and ecosocialist prospects - and addressing the possible limitations of these discourses from the emerging evidence - may prove to be of vital importance for these struggles.

Keywords: anti-/post-extractivism, semi-periphery, just(ice) transition, cheap natures

Andrzej W Nowak

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Adam Mickiewicz University

“How much does fighting Agnotocene cost? (Un)invisible work and structures of knowledge”

Knowledge is power. Having sustained, credible knowledge structures is important. As pointed out by Ch. Bonneuil and J. B. Fressoz people knew that the capitalistic mode of production is destroying Earth since the beginning of the Capitalocene. But this knowledge was suppressed and ignorance was cautiously produced. Capitalocene is era ignorance – Agnotocene.

The aim of the presentation is to show how the discussion about Anthropocene/Capitalocene can be enhanced by the use of a simple tool -“calories calculator”. It is inspired by food studies (Haroon Akram Lodhi) and allows you to compare the amount of calories spent and obtained in a given cultivation method. The generalization of the so-called calorific calculator would allow us to recalculate other activities and practices so that we can analyze our “energy footprint”. Thanks to that we would obtain a more universal tool than the so-called carbon footprint or ecological footprint. It is worth mentioning that such an understanding of the so-called calorific calculator is already present in literature and is used in Paolo Bacigalupi's novels and short stories. The use of the so-called calorific calculator would make it possible to reveal the energy privilege of many of us, and the real cost of many practices, including the title question: how much calories did your knowledge production cost? This will allow you to recognize the amount of work that is necessary to produce and sustain knowledge structures. Such an approach will make it possible not only to ask about the politics of nature but also to ask about the work of nature needed to study the politics of nature at all. As a result, we can ask about the ontology of knowledge in the intertwining of the web of life and capitalism.

Keywords: Agnotocene, structures of knowledge, Agnotology, Capitalocene

O

Paula Oddone Souza

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Co-Authors: **João Marcos Marquezini Leite**, MSc. student in Teaching and History of Earth Sciences Program, IG, UNICAMP – University of Campinas) and **Luciana Cordeiro de Souza Fernandes** (Doctor Professor in Teaching History of Earth Sciences Program, IG/ FCA UNICAMP – University of Campinas

“How the Implementation of UNESCO Global Geoparks in Brazil Could Be Supported by the Country Climate Policies”

Several institutions and intergovernmental organizations have been establishing adaptation and mitigation actions to climate change in recent decades. It will be required strategies on global and local scale. However, in order to legitimate transformation processes, they must be inclusive and socially just. That is, spaces for discussion must give voice to different cultures and needs of those

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undergoing the processes of change. UNESCO Geoparks are areas with international geological relevance aspects managed under protection, education and sustainable development. The governance of these areas must involve actors from both civil society and public power, attending transformation processes for sustainability. It should be bottom-up structured and must submit to local legislation. In Brazil, one can find in the National Policy on Climate Change (PNMC) some guidelines that support and corroborate with Geoparks framework in the national territory, so that they could be seen not only from the international guidelines of Unesco but also through the own conduct and norms of the country. Thus, it was possible to connect the precepts of the Geoparks and the PNMC on different policy fronts: Principles, Guidelines, Objectives, and Instruments. In order to conclude that the implementation of Geoparks in Brazil, in fact, has support within the country's climate change policy.

Keywords: Transition to sustainability, National Policies, 2030 Agenda, Geoparks

P

Magdalena Popławska

Doctoral Candidate, Sociology, Adam Mickiewicz University in Poznań

“Building food communities: an agroecological perspective”

The paper will explore the emergence of the “new peasantry” in Central and Eastern Europe and draw on sustainable food production debates conducted in rural sociology and food studies. The United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas offers a potential groundbreaking perspective on the discussion. The document was adopted in 2018, as a culmination of several years of efforts by farm workers, agricultural trade unions, women’s rights activists, and other groups. In the declaration, the term “peasantry” is invoked in reference to agriculture’s contribution to food security and biodiversity in the face of climate change, poverty, hunger and malnutrition experienced in different parts of the world. The author will draw on the literature devoted to the “new peasantry” in Poland and her own activist practice which overlaps with qualitative participatory research concerning alternative food initiatives. The presented analyses will focus on the Central and Eastern European Meeting of Community Supported Agriculture, a 2021 event which took place in Poland and was attended by participants from such countries as Czechia, Poland, Slovakia, Hungary, and Austria. During this meeting, the author acted both as a researcher and as a representative of grassroots agroecological initiatives. The participants were introduced to the concept of a seed house which was established by farmers from the Sudetes who are committed to deepening and sharing agricultural knowledge, preserving local biodiversity, and reclaiming power over seeds by challenging the restrictions which corporations impose on food production, distribution, and consumption. This paper addresses the key issue discussed at the meeting, i.e. building food communities, in the context of the growing importance of alternative food networks in rural communities. The concept of peasantry will thus become the starting point for a discussion of social and ecological functions of the countryside and agriculture, including the role of local and translocal food activism.

Keywords: new peasantry, agroecology, food activism, food communities

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George Poulados

Graduate Student, Public History, Hellenic Open University

“The future of water: commons or commodity?”

As the ecological crisis becomes part of the daily lives of more and more people all over the world, the forces of capital seek to control the most basic and valuable goods on the planet. One such case is water. Under the pretext of improving water quality and water infrastructure, governments around the world are attempting to privatize water by selling it to big companies. On the other hand, serious efforts have been made by social movements, both locally and nationally, to form a resistance to such neoliberal practices. We follow various attempts to privatize water (Bolivia, Chile, Greece, Nigeria, Philippines, South Africa) and the resistance arising from this policy. We also examine the motto of the social movements “water belongs to everyone, and no one” and the practical and theoretical issues that arise for those attempting to create alternative forms of social relationships, lifestyles, and resource management under conditions of extreme inequality and deregulation of social life.

Keywords: Water, Commodity, Commons, Local resistance

Janina Puder

Researcher, Institute of Sociology, Friedrich Schiller University

“Cheap palm oil, cheap migrant labor? The superexploitation of migrant workers in the palm oil industry”

As the ecological crisis dynamic intensifies, so does societal pressure to decouple the global economy from its dependence on fossil resources. However, currently all political strategies pursuing a ‘green’ transformation of the economy build on the prevailing principles of capitalism playing by the common rules of capital accumulation (including free market competition, growth and de-/commodification) and the exploitation of nature and labor. In search of alternative energy resources, the demand for biomass has increased dramatically in the last decades. In this context, the Southeast Asian palm oil industry has gained significant importance.

With increasing global demand for palm oil, the promotion of the sector became an important strategic factor for national economies in the main cultivation areas in Indonesia and Malaysia. Due to its energetic characteristics, palm oil is particularly suitable to produce alleged ‘sustainable’ agrofuels. This has led to a massive expansion thrust of oil palm cultivation resulting in the emergence of a regional accumulation regime based on the export of cheap palm oil for the world market and the cheap import of trans-/regional labor. Thereby, the expansion of monocultural oil palm cultivation is shifting the frontiers between plantations and zones previously dominated by (primary) forest. Ever larger parts of complex ecosystems are being enclosed and transformed into vast agro-industrial landscapes. At the same time the rapid expansion of the palm oil industry co-produces labor relations, which in Malaysia are essentially characterized by the exploitation of low-skilled migrant workers.

Drawing on Moores idea of the interconnection between cheap nature and cheap labor, I argue from a world-ecology viewpoint that in case of the Malaysian palm oil industry, the superexploitation of migrant workers provides the basis for the profitability of palm oil production.

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From the perspective of capital superexploitation can be understood as a strategy to appropriate additional surplus value from expended labor power. For workers superexploitation is manifested in wages below the level necessary for workers to reproduce their labor power as well as labor conditions leading to physical (and psychological) exhaustion. In consequence, to sustain the reproduction of their labor power migrant palm oil workers rely on additional sources of income and a pooling of resources within the transnational household. To unfold the thesis of superexploitation I draw on empirical findings from Sabah, East-Malaysia – a main destination for migrant workers as well as an important area of current oil palm expansion.

I argue that the connection between difficulties in reproducing labor power and the still high proportion of unorganized migrant workers is conditioned by oppressive social, institutional, and political mechanisms disciplining Malaysia's migratory labor reserve. I show that through the prevailing labor migration regime, the state creates the precondition for superexploitation in the palm oil sector. The segmentation of the labor market, the segregation of migrant workers by citizenship, the discrimination of migrants in terms of union organization and the flexibilization of labor migration constantly disciplines and devaluates the labor power of migrant workers keeping their labor power cheap and disposable – nevertheless, there is also resistance forming.

Keywords: cheap labor, palm oil, superexploitation, migrant worker

Oliver Pye

Assistant Professor, Southeast Asian Studies, Bonn University
WERN 2022 Conference Organizer

“Bringing more Labour Movement into World-Ecology”

World-Ecology has hitherto emphasized the (structuralist) agency of capital in the world-historical expansion of waves of commodity frontiers, by which capital reinvents itself through “developmental ecological crises,” temporarily solving the declining rate of profit through “global ecological fixes.” In more recent debates, Jason Moore has begun to look more closely at the interrelation between the “Femintariat and Biotariat” with the proletariat, particularly in the context of what he sees as the “implosion of the Great Frontier.” Continuing this conversation, this paper suggests that World-Ecology could benefit from more attention to world-historical waves of class struggle, particularly of the proletariat. A good place to start is the revolution by the slave proletariat of Saint-Domingue's plantation economy in 1791. As Moore observes, “Haiti's sugar revolution was stopped dead by proletarian insurgency, not soil exhaustion.” To develop this idea more systematically, the work by Beverly Silver, which stresses how the spatial dynamics of accumulation cycles created and were shaped by “strategically located working classes,” could be related explicitly to world-historical developmental ecological crises. This paper proposes that drawing on insights and work from Labour Geography, Global Labour History and Environmental Labour Studies could enrich World-Ecology as a story of class struggle, and, vice-versa, provide the former with an innovative world-historical framing. The conversation between these fields might point to different perspectives of global emancipation.

Keywords: labour movement, class struggle, global labour history, environmental labour studies

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R

Hans Rackwitz

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“The Social-Ecological Question in the 21st Century. On the interactions of class and nature relations and the foundations of a social-ecological theory of class.”

The paper argues that the Marxian concept of class still holds enormous analytical and political-emancipatory potential for today's societies and the struggle for social-ecological equity and sustainability and asks for the contours of a socio-ecological class theory. The Marxian class concept must however be extended, updated and corrected of false adaptations and abbreviated understanding, that reduce the complex reality of class relations as social relations, to a single aspect of class relations or that absolutize one level of real class relations for their totality. Such false understandings are in consequence often either economic dead ends or premature dismissals of the critical potentials of the Marxian class concept. To make class fruitful for the analysis of ecological problems and progressive social-ecological politics, it must be able to reflect and theoretically integrate questions of ecology and societal nature relations on all levels of class relations and orient these reflections towards an eco-socialist class politics.

The presentation will delineate levels of inquiry and abstraction in class theory and define classes as social-relational, openly or latently antagonistic and thus as dynamic socio-economic relations of domination. They have an economic origin, determined by their position in the historically specific social organization of production and reproduction and the economic division of labor, a socio-economic profile of concrete class conditions and a political character as potentially collective actors. These levels of class relations correspond analytically with the understanding of class theory as political economy and social structure analysis, as inequality studies and as theory of conflict and social change.

The starting point of a socio-ecological class theory is the dual character of labor and commodities and the concept of work-mediated social metabolism, from which it follows that all formal and informal economic processes are at the same time metabolic processes of material and energy transformations under the laws of physics. With the position that social groups and individuals occupy in the social organization of labor, the position that they occupy in the regulation of social metabolism thus also follows. The dual character of labor and commodities implies multiple contradictions between the logic of exchange values and of use values, that are not confined to commodities and the commodity of wage labor, but stretch out to the whole of global socio-ecological reality. Such an approach is able to analytically grasp the capitalist (!) Nature-Society dualism and the dialectic of exploitation and appropriation of capitalist accumulation and domination. A social relational, value-relational conception of class is thus a fruitful theoretical heuristic to grasp the mediations and interactions between capitalist form determined social(-ecological) relations and non-capitalist form determined social(-ecological) relations, that are substantially unified in the web of life, but are forcefully dualized by capitalist value socialization.

Keywords: Class theory, labor, social metabolism, value theory

Marija Radovanovic

Doctoral Candidate, Sociology, SUNY Binghamton

“Global Environmentalism's Counterrevolution: Imperialism, Class and Nature - Accumulation Crisis as Environmental Crisis”

This essay discusses the history of the US hegemonic re-making of nature. It starts with presenting the plans for the emergence of the United States hegemony, and discusses the political economy of the American empire after the World War II. It shows how the material needs of the empire – and I foreground the necessity of subordination of the international proletariat - generated postwar environmentalism of ‘man vs. nature’, and its origins in the pre-hegemonic nature conservation movement in the US premised on the protection of master race. The essay will bring into relief the crucial role of the postwar environmental discourses at the moment of emergence of the US empire qua planetary accumulation in facilitating the global environmentalism as 'humanity against environment' at the moment of accumulation crisis and the hegemonic decline. I investigate the contradictions within the US postwar foreign policy, as the American Cold War policies that followed the preeminent environmental discourses, sought to expand accumulation by launching the politics of “development”, and were at odds with these discourses. I will conclude that with the fall of the global rate of profit and the hegemonic decline, the ‘man vs. nature’ was revived and became the prevalent doctrine of the popular environmental movement, adopting a position where the world working classes are constituted as nature's antagonist. This renders contemporary casting of environmental crisis misleading, as the environmental degradation is not superimposed, as an activity forced upon “nature”; rather, nature is re-created by political economy of capitalism, both discursively and materially. Put in even more cogent way, “capitalism is a way of organizing nature”. There is nothing particularly arcane about this: the notion that of all of history – including the history of capitalism – is premised on the real, material, sensuous activity of transforming the web of life, is the very foundation of Marx' thought.

Keywords: environmentalism, working class power, US imperialism, overpopulation

Nora Räthzel

Full Professor, Department of Sociology, Umeå Universitet

Plenary Speaker: Wednesday, June 8, 15:30-17:00

“The Question of Agency in World-Ecology Conversations”

Coming from Environmental Labour Studies (ELS) I have benefited enormously from the work of Jason Moore, Diana Gildea, and other scholars of the World-Ecology Research Network. Our interest in ELS is labour as the mediator of human and non-human natures. At the beginnings of Marx' analyses of Capitalism, in the Economic-Philosophical Manuscripts written when he was 24, he said: That humans live on nature means that nature is their body, with which they must remain in continuous interchange if they are not to die. That humans' physical and spiritual life is linked to nature means simply that nature is linked to itself, for humans are a part of nature.

Aiming to pursue our research from the point of view of this inseparable relationship, Moore's insistence on thinking capital-in-nature and nature-in-capital is a central perspective and a constant challenge: to understand workers' practices as ways of transforming extra-human natures and being

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transformed by them; a task that is not obvious when most of our research is conducted with workers in heavy industries.

World-ecology scholars write the history of the oikeios predominantly in terms of capital acting in an unmediated way through nature. It is a history of the ways in which capital transforms nature into 'natural resources', constructs 'most women, Indigenous Peoples, colonized people and slaves' as nature to appropriate their work for free. It is history of how capital cheapens workers and natures and is forced to transform itself constantly.

From the point of view of ELS, though, something is missing: the agency of workers. In *Capitalism in the Web of Life* Moore writes: 'Nature-as-oikeios is, then, not offered as an additional factor, to be placed alongside culture or society or economy. Nature, instead, becomes the matrix within which human activity unfolds, and the field upon which historical agency operates. From such a vantage point, the problems of food, water, oil (and so much more!) become relational problems first, and object problems second; through the relations of specific civilizations, food, water, and oil become real historical actors.'

On this general level, human activity and nature's activity are intertwined. However, when it comes to writing this history the main actor is capital, not capital as a relationship between workers and non-human natures, since workers appear only in the way they are subsumed under and exploited by capital. There is reference to the fact that workers resisted but how this happened and how this affected capital acting through nature remains vague. Nobody can theorise totality.

Therefore, I would like to discuss how the agency of workers could be integrated into a world-ecology perspective and how ELS could make more use of the world-ecology paradigm. Using a broad concept of agency that includes resistance and subordination opens the fields of ideology, everyday cultures, the Gramscian notions of common sense, organic intellectuals, and hegemony to the perspectives of world-ecology and ELS. I will draw on results of our research on environmental policies/practices of trade unionists in the Global North and South.

Keywords: Environmental Labour Studies, Agency, Workers' movements, Ideology, Culture

Davide Rizzardi

Researcher, Critical studies, CLACSO - UBA

"The heterogeneity within the unity. An inquiry on the ideological construction of cheap natures."

Inherent to capitalism there is a tendency towards heterogeneity. The unevenness of its development is a constitutive element and a condition for its existence. World-ecology postulates that capitalism is a dialectical and contradictory unity of production and reproduction, but it is also important to acknowledge that reproduction and production in a pure fashion hardly ever exist. Each of us inhabits the blurred line of division between these two spheres and generates an hybrid subjectivity. Therefore, within the continuum that goes from production to reproduction, or from paid to unpaid work, there may be different subjectivities, temporalities and regimes of materiality. This work aims at understanding this heterogeneity within the unity of capitalism as a world-ecology, or better, the stratification in the constitution of the different subjectivities that articulate the complex web of relationships that keep capital alive and permit the coexistence of all the different regimes of paid and underpaid labor.

Since Rosa Luxemburg's critique, it was possible to unveil the essential role of all the forms of "exteriority" to capitalism as a condition for its existence. Luxemburg emphasized the role of the

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colonies as a condition of possibility for the expanded reproduction of capital. Likewise, throughout the XX century, feminisms and eco-marxist critiques suggested the essential role of the unpaid work of both human and non-human natures as a condition for the reproduction of capitalism. Such theories brought light to the hidden realm of reproduction demonstrating its importance for the accumulation of capital as well as for its inherent tendency towards crisis generation. According to the above-mentioned theories, this tendency was resulting from the contradictory nature of the relationship between capitalism and its forces of reproduction. By virtue of these contributions, the realm of reproduction, together with its set of idiosyncratic subjectivities, was finally recognized as a legitimate site for political struggle aiming at social emancipation.

The world-ecology critique, deeply inspired by these previous contributions, agrees that capitalism could not persist if not for the work of cheap natures within the web of life. What the present work tries to address is the way in which these forms of underpaid work - that are so essential for capital's reproduction - are constructed, both materially and discursively, within the web of life. In other words, this work reflects upon the dispositives, i.e. the discourses and practices that operate for identifying and constructing the blurred line of division between productive and reproductive forces, visible and invisible value, man and nature.

Addressing this question, that could be reformulated as the classical question for the subject and its production, would imply considering the pivotal role of ideological elements in the construction of such heterogeneous subjectivities. Gramsci and Althusser's work would be a key starting point for appreciating the centrality of ideology as a structuring element of the complexity of the social.

Moreover, this question would encourage a multi-epistemological dialogue involving other critical epistemologies such as post-structuralism, postcolonial and decolonial thinking. These theories could help us

to better understand the different regimes of representation that operated historically in the construction of subaltern subjectivities as, for instance, the Orient (Said), the Third World (Escobar), Latin America (Mignolo), Africa and the Racial Subject (Mudimbe, Mbembe). Last but not least, discourse analysis will provide insights on the way in which nature has been constructed as a subaltern element and transformed into an external object, commodified and subordinated to the interests of appropriation and control of man.

Keywords: Uneven development, Forces of reproduction, Ideology, Cheap natures

Morad Roohi

Doctoral Candidate, History, Queen's University

“From Plain to Laboratory; A Land Trapped between the Western Colonizers and the Iranian Nationalists”

Located in southwestern Iran, Khuzestan is the largest plain of the country. It stretches from the Zagros Mountain ranges and drains the biggest rivers of the county into the Gulf. Separated by Zagros Mountain ranges from the Iranian government, the territory and its inhabiting indigenous population enjoyed a high level of autonomy for centuries. In the late nineteenth century two main forces invaded the plain and started to change its landscape. Motivated by extractive colonialism, the Britons discovered the oil in the plain in early twentieth century. And obsessed with territorialization of the political power of the governments, the Persian nationalists approached the plain and aimed to suppress the local communities and to subjugate them to the will of the Iranian Nation-State. Extractive colonialism and resentful Persian nationalism had a troubling relationship over the fate of

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the plain for decades, however, they shared the same colonizing agenda, that is the dispossession the indigenous population from their lands and their water resources. Trapped between the Persian elites and western colonizers, the plain was first transformed from the winter pastures of the tribes of the Zagros ranges and agricultural fields of the indigenous Arabs to the extraction oil field up until the nationalization of the oil in 1951. After 1951, the Persian elites took over the colonizing apparatus established by the Britons and reduced the whole plain to a laboratory for practicing the developmental projects before applying them to other parts of the country. In this paper, I aim to discuss how the western colonizers and Persian nationalists transformed the Khuzestan plain in the first half twentieth century. Also, I will discuss the significance of this transformation for indigenous population of the plain.

Keywords: Third World Nationalism, Nation-state, Political Exclusion, Ecological Marginalization

Curtis Runstedler Runstedler

Researcher, English Studies, University of Stuttgart

Co-Author: **Leonie Kirchhoff**

““Advantageous to Life” – Isolation and Ecology in Shakespeare’s The Tempest and Owen’s Where the Crawdads Sing”

Shakespeare’s *The Tempest* can be read as an ecocritical text . As a result of the play’s interest in issues, such as ecological sustainability, we argue that it is possible to distinguish three kinds of world views in Shakespeare’s play which reflect the opposing interests and values that also shape the discussions concerning the future of our planet: Prospero’s capitalist rule of the island, Gonzalo’s dream of a Marxist utopia, and Caliban’s anarchic behaviour are intricately connected to their attitude towards nature and the microcosmic world of their desolate island. Moreover, we argue that this initial analysis can be used to discuss modern ecocritical texts, such as Delia Owen’s *Where the Crawdads Sing*. This novel parallels *The Tempest* as an isolation narrative, and the protagonist Kya’s complex personality reveals qualities of all three character types. The question we aim to answer is therefore whether Kya’s character and character development offers a way of negotiation between these opposing ideas.

In our paper, we will present an analysis of the three types in *The Tempest* and demonstrate how these are shown in Kya’s interaction with other humans as well as in her exceptional relationship with her rich natural environment. The analysis, however, reveals her character as problematic. In fact, the extreme views and reactions to the world found in the characters Prospero, Gonzales, and Caliban in *The Tempest* can be read as contributing to the intricacies of Kya’s character. Therefore, despite her heroic struggle against adversities and her understandable desire to be loved, she is an irregular heroine whose decisions and actions disqualify her from becoming a member of society. This statement is further supported by the fact that she is eventually revealed as the murderess of Chase, her ex-lover and later sexual assailant, which creates mixed emotions about her character. We thus suggest that rather than offering an answer, the novel ultimately leaves us with the question where we as readers and as a society see ourselves in relation to this complex triangle.

.In this presentation, we aim to illuminate the parallels between the two isolation narratives. In light of world-ecology, *The Tempest* establishes a foundation for better understanding contemporary concerns about ecological sustainability and unruly natures. Furthermore, its template of three core

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attitudes towards nature becomes manifest in contemporary fiction, notably *Where the Crawdads Sing*, and thus forces the reader to confront their own sustainable roles towards nature.

Keywords: ecocriticism, English literature, Renaissance studies, climate change narratives

S

Silpa Satheesh

Assistant Professor, School of Development, Sociology, Azim Premji University

“They are all anti-developmentalists”: Exploring the Influence of Industrial Capitalism on Labour-Environmental Relations in Kerala, India”

The near-complete absence of capitalism in mainstream social movement literature is appalling, considering the replete presence of movements fighting against the environmental grievances engendered by capitalism across the globe. This strange absence must be perceived as a deliberate attempt to legitimize and normalize capitalist accumulation and concomitant exploitation, so much so that all anti-capitalist movements could be relegated and framed as illegitimate, abnormal, and extremist. In this paper, I explore the connections between capitalism and environmental movements surrounding an issue of industrial pollution in the Eloor-Edayar industrial region in Kerala, a south Indian state. The paper is based on the data collected during extensive field research conducted in Kerala from April to July 2018. The ethnographic method and analysis used in this project are informed by a combination of the extended case method and constructionist grounded theory.

In this paper, I demonstrate how industrial capitalism seeks to demobilize, discredit, and delegitimize local environmental movements in Kerala by creating schisms within working-class movements (labor and environmental movements, in this context). In doing so, I argue that capitalism masquerades and invades the region using the ideology of economic development, co-opt the leadership of organized trade unions and counterframes environmental movements as “anti-developmentalists,” “extremists,” “pseudo-environmentalists” and “anti-nationals.” More so, the shifting labor politics in Kerala (from class-conflict to class-compromise) play an instrumental role in exacerbating the conflicts between labor and environmental movements in Kerala. The paper argues that labor operates as the agent of capitalist development and works toward cementing capitalist hegemony by manufacturing consent in favor of capitalist accumulation and profits. I argue that this is indicative of the larger trend in Kerala, where the political left and grassroots environmental struggles are polarized on issues pertaining to development. Also, the unique trajectory of development, working-class movements and the class-compromise between labor and capital in Kerala provide an opportunity to understand labor-environmental conflicts in the milieu of capitalist production. The findings of this paper highlight the importance of situating studies on postcolonial environmental movements within the backdrop of capitalism, the political economy of development and state-capitalist nexus.

Keywords: capitalism and social movements, labor and the environment, Kerala, class and class compromise

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Gianfranco Selgas

Researcher, Nordic Institute of Latin American Studies, Stockholm University

“A Discontinuous Conjunction of Unstable Condensations: World-Ecology and the Agency of Literature in Latin America and the Caribbean”

My presentation proposes to relate a notion of literature and world-ecology as makers of critical environments in Latin America and the Caribbean, and it will address the problem of Nature and Society as real and ruling abstractions. Departing from Campbell and Niblett (2016), I will propose that the symbolic praxis of literature and the material transformations encompassed in the web of life form an entanglement of environment-making informed by the notion of world-ecology (Patel and Moore 2020). From that point of view, I am particularly interested in the modes that fiction brings to the fore historical systems such as capitalism and literature as ecological projects. In order to advance this idea, I will take as examples contemporary literary works by Puerto Rican Jotacé López and Colombian Juan Cárdenas. These fictions depict the historical and contemporary complexity of monoculture plantations as systems of nature commodification and socio-ecological transformation. They recast colonial legacies of violence, labor exploitation, racial difference, and environmental degradation in Puerto Rico and Colombia. I will discuss how fiction not only deals with readings and representations of ecological transformations and crises but also how it interweaves with and contributes to the production of specific ecological regimes in the web of life. By reframing world-ecology in the context of literary and cultural analysis, I will propose that fiction not only serves the purpose of mimesis but can be read as a form of environmental history, going beyond the nuanced conceptualization of the environment as a nature-culture dichotomy. Finally, my presentation aims to expand world-ecology's theoretical and methodological potentiality in the fields of literary and cultural studies. It will contribute to the world-ecological discussion by following one of Moore's principal arguments: the need to continue "developing a language, a method, and a narrative strategy that puts the oiekeios at the center" (2015: 4).

Keywords: monoculture plantations, fiction, environmental history, Latin America

Silvija Serafimova

Associate Professor, Department of Ethical Studies, Bulgarian Academy of Sciences

“Challenging the project of Cheap Nature as a path towards planetary justice. Some ethical reflections”

The main objective of this paper is to analyze how the two-folded praxis of cheapening which underlines Capitalism, namely, cheapening in the sense of price and cultural domination (Moore 2019), as embedded into the project of Cheap Nature, can be reconsidered by promoting planetary justice through the enrichment of environmental justice with ecological justice. Based upon the understanding of planetary justice as a matter of finding strategy that links justice across and through the aforementioned two modes of cheapening (Ibid.), I explore whether environmental justice (or justice among humans on environmental issues and risks) can contribute to disenchanting the risks of cheapening as risks posed by the recognition of humanity and nature as separate ontological entities (Moore 2013). Consequently, the role of ecological justice (or justice to non-human nature) is examined as pointing towards the recognition of what Moore calls humanity-in-nature (Ibid.).

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Specifically, the introduction of ecological justice to the debate will be investigated as necessitating the reevaluation of Nature-as-Oikeios not only as ontological, but also as ethical matrix.

Keywords: Cheap Nature, planetary justice, environmental justice, ecological justice

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“Materializing Inequality: Colonial Environmental Transformations and Contemporary Class Formation”

How have modern environmental transformations produced class inequalities? This paper addresses such question focusing on the case of the Colombian oil palm industry. In Colombia, small-scale independent farmers coexist with large-scale plantations and a recent oil palm disease revealed the dramatically different distribution of risks between them. I argue that the continued legacy of colonial transformations has resulted in this unequal distribution of risks between small- and large-scale oil palm growers, producing new class inequalities today. Over the past 100 years, palm oil industry actors have materially transformed the genetics and management practices of oil palm trees and crops around the world. Colonial goals initially drove these transformations, which are materialized today in tropical landscapes around the world and facilitate value extraction for corporations while impoverishing labor and small-scale farmers. Through a world-ecological perspective, this paper expands current understandings of how relations of social inequality shape and are shaped by the production of modern landscapes.

Keywords: Global value chains, Gender, Agriculture, Oil palm

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“Buruh Siluman: The Making of Cheap Labour on Oil Palm Plantations in Indonesia”

As the world's largest producer of crude palm oil (CPO), Indonesia has drawn scholarly attention to the impacts of the country's oil palm plantation sector. Whereas such discussions have mainly focused on the impacts on rural development and the environment, there has been increasing interest in the working conditions on oil palm plantations. Whilst the oil palm plantations are viewed as an important sector for employment creation, studies reveal deficit working conditions on plantations. The latter is particularly experienced by women workers on plantations. The so-called as buruh siluman, or invisible labour, women workers are mainly employed as casual workers on plantations, showing the capitalist' strategy to employ cheap labour. This paper traces the making of cheap labour on Indonesia's plantations. Employing the concept of world-ecology, this paper seeks to understand the organisation of socioecological relations for capital accumulation on plantation sector. Central to this organisation is cheap labour on plantations. This paper argues that the making of cheap labour on plantations is tied to modernity's commodity frontiers. The latter is understood as both territorial and cultural projects as well as the mobilisation of geographical knowledges which enable the appropriation of cheap nature as well as unpaid and cheap labour. This entanglement is illustrated through the role of the “coolie” women on plantations during the Dutch colonisation.

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The making and maintaining of buruh siluman as cheap labour on plantations is pivotal in capitalist organisation of socioecological relations for the development of palm oil as cheap food.

Keywords: palm oil, Indonesia, labour, women workers

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“Rethinking labor and technology from the perspectives of Territorial Metabolism and Actor-Network Theory in the Bogota River (Colombia, South America)”

The idea of Territorial Metabolism (TM) is rooted in the integration of social metabolism and the systemic branches of geography. Social metabolism arrived to the theoretical scene with Karl Marx who used this concept (Stoffwechsel) as an organic analogy to define labor as the relation of appropriation of nature on the part of society. My doctoral research of Geography titled Social Metabolism, Sustainability and Territory in the Bogota River proposed Territorial Metabolism as an integral framework to interpret and analyse sustainability. This framework articulates social metabolism in terms of hydrosocial cycle, energy and information flows with the historical transformations in the territory of the Bogota River, one of the most polluted rivers in Colombia (South America) and probably in the continent.

Social metabolism perspective emerged from a systemic perspective supported in the inherent connection human-nature in opposition to the idea of division and fragmentation inherited from cartesian thought. Humans and nature are inherently joined, there are no divisions between them, everything is connected and related. Life is the main connection between humans and nature (complex and coevolutionary systems), is the best example of no division, and life is possible due to metabolism (Capra, 2015). Metabolism is a process that occurred at cellular level and also at ecosystem, human and social. In those terms, sustainability is understood as a coevolutionary process in which societies and all its organisational forms, do not interfere with the inherent ability of nature to sustain life, to sustain its own metabolism.

Nevertheless, social metabolism has been also criticised for being “just another environmental accountancy system” that relates physical flows with economic figures at global or national levels in terms of materials or energy. “The social” has been a bit forgotten in the scene of analysis according to Toledo and González de Molina (2014). This research proposed the articulation of territorial approach to the social metabolism to contribute to strengthen the social in the metabolic perspective. The territory has been also a controversial concept in different disciplines but in this research is understood as a network, product of interrelations of socio ecosystems or socio ecological systems rooted in a geographical space, lived, thought, felt, worked, appropriated and transformed. It is not just a physical extension of land, it is about belonging, identity, territoriality. The territorial metabolism is proposed as a way of applying the metabolic perspective in one territory involving not just physical quantities that describe the natural basis but also the social flows interrelated in the process of life. Water to live, energy to transform and develop activities, water and energy for sustaining life and also water and energy understood from the perspective of the social actors in these territories.

In the context of exploring the TM approach through the process of confronting social metabolism and the systemic branch of geography, I found in the Actor Network Theory (ANT) an interesting and radical approach. Rooted in a flat ontology and also in the idea of no-division or fragmentation, this approach addresses the human and no human actors (or actants) at the same level of importance and each one as an actor and network at the same time, with the same agency. ANT comes from the

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Social Studies of Science and Technology and nature and artificial objects or infrastructures are not just seen as actants but also as networks (rhizomes) that conforms the assemblages. The role of technology seen as an actor-network is integrated with the role of technology from the metabolic perspective with territorial focus. From this view, human-nature metabolism is possible, amongst others, due to technology.

Complementarities or opportunities of connection between TM and ANT were found with technology and labor as analytical categories. As it was mentioned before, those categories are not seen as just mere isolated concepts or elements but as actor-networks that can be addressed from the global to local perspective (TM) but also from the local to the global scale (ANT). Specifically, for the Bogota River case, I analysed the agrarian labor and technologies related with water in the framework of historical environmental changes from the second half of twentieth century until today. In this period, it was possible to evidence a metabolic rift in farming practices and the negative effects in the long-term for sustainability because of the Green Revolution arrival to Colombia in the 70s and the neoliberal policies in the 90s.

The territorial focus gave the possibility to explore the social basis of this case, to build knowledge and interchange with local social actors who live and have lived in those spaces. The changes in time of the water technologies can say something about the water paths, the ways in which societies have adapted themselves to supply water for its life, have transformed nature in this adaptation and also have created ideas, discourses, identities and other strong ties, relationships with water, nature and life. Water is essential to life. I would like to contribute in this conference to the debate of the world ecology network with some insights about the ecological view of marxism in the metabolic perspective, the metabolic rift and the role of technology in the human-nature relation. The territorial focus developed in this research allowed to integrate to the academic discourse the ideas of local people and social groups and to develop some of the ideas of political ecology of water to this rural space. Those insights could be a reference for the complex environmental problems of water pollution and deforestation in other parts of the world, especially in the global south.

Keywords: Agrarian labor, Technology, Territorial Metabolism, Bogota River

V

Gabriele Volpato

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“Social reproduction at the commodity frontier. Food procurement strategies among migrant workers in Kenya’s flower farms”

This contribution presents research conducted among workers employed in the Kenyan floriculture sector. During the last thirty years, the floriculture industry has delocalized the production of cut flowers to areas at the periphery of the global circuits of capital, transforming ecologies and attracting migrant workers wherever it expanded. Building on the conceptualization of global floriculture as a commodity frontier, we explore migrant workers’ food procurement strategies at the flower farms of Naivasha, Kenya, and discuss how the frontier redefines and is defined by these strategies. The study shows how workers pursue food security through rural-urban food transfer and

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food sharing embedded into diversified multi-local household strategies and networks of reciprocity. Two major findings are presented: first, we point to social reproduction, in the form of eco-reproductive subsistence labour, as a key element to understand the dynamics of global capitalism expansion via commodity frontiers. Second, we show how food transfers take place within expanded networks of multi-local households that tie the frontier to distant geographies, ecologies, and livelihoods, embedding the latter into global chains of roses and carnations. Against this backdrop, we contend that distant rural livelihoods and ecologies are being bent to the frontier's interest well before they become part of the frontier itself.

Keywords: Global commodities, Reproductive labour, Floriculture industry, Rural-urban food transfers

W

Doerte Weig

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“Cities and Plants: Bodying individual-collective relations in novel ways”

How do we relate and live well with vegetal life in our densely populated cities? What can we learn from plant dynamics about our urban bodily presence? Which are the broader, global implications about how vegetal life is instrumentalised in processes of neoliberal value creation and capital accumulation? This contribution explores how the diversity of vegetal life offers and defies us to consider what are individual-collective relations in novel ways. Ecologically sensitive attention to plant bodies can help move beyond capitalist understandings of human bodies as individualized and efficient. This approach draws on how ‘plant bodies challenge and energise human-centred concepts of the body by expressing different forms of collectivity, mobility, and agency’ (Atchison & Head 2013: 965). As spatial and socio-cultural pressures in urban areas continue to increase, critical plant studies offer novel avenues for thinking-and-perceiving urban presence and planning beyond exploitative smart technology solutions. The diversity of vegetal life can inspire regenerative urban futures where embedded individual-collective dynamics underlie a more-than-human political economy.

Keywords: Critical Plant Studies, Cities, Regenerative Value Creation, More-than-human political economy

Markus Wissen

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“Ecological crisis and infrastructure socialism”

In times of fundamental transformations the contradiction between labour and the environment seems to aggravate. Mining workers fight for their jobs which are threatened by the transition towards a renewable energy system, automotive workers are confronted with the threat of job losses due to a reorientation towards electric automobility. The Just Transition concept aims to create a balance between jobs and the environment. In doing so however it often falls short to address the

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deeper causes of the ongoing transformations, namely the socio-ecological contradictions of capitalism. As a consequence, a reconciliation between jobs and the environment is seen in an ecological modernisation of the prevailing patterns of production and consumption rather than in concrete strategies to overcome them. The concept of “infrastructure socialism” suggests another approach. It understands the aggravation and accumulation of crises as a consequence of capitalism’s tendency to undermine its own preconditions – paid and unpaid labour as well as nature – and imagines an economy that puts the reproductive necessities of humans and nature centre stage. It thus provides both for an analysis and for a strategic orientation that can inform struggles for alternative futures.

Keywords: ecological crisis, jobs-vs.-environment dilemma, socio-ecological transformation, infrastructure socialism

Y

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“Slave, Prisoner, Migrant: Ecologies of Development on Europe's Farthest Border”

This paper considers the historical work-life nexus resulting in the emergence of Guyane Française (French Guiana) as the last European colony, now a French département d'outre mer (DOM), on the South American mainland. In Guyane, we can locate three successive regimes binding labor with nature, illustrating world-ecological trends in capital's construction of markets and primitive accumulation at the (remaining) edges of Europe in the New World. While these regimes have as much to do with environmental destruction and expropriation as with labor exploitation, we can identify them by their power over human transportation and the shifting definitions of slavery that they exemplify and upon which they rely: (1) the transportation of primarily Afro- and Afro-Caribbean slaves, (2) the transportation of colonial prisoners during the establishment of the prison colony (1851-1950), and (3) the "resettlement" of former colonial subjects, both Hmong refugees from French Indochina and Haitian migrants, beginning in the mid-Twentieth Century. Each of these regimes contributes to class and ethnicity formation in Guyane, emergent as "ethnic labor niches," empirical in both historical and contemporary ethnographic records. This story on the farthest edge of France uncovers the insidious ways in which capital transforms "value" to grasp resources - natural and human - in ecological relation to each other.

Keywords: plantation, colonialism, transportation, migration

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“The Green Capitalism Discourse: The Reconfiguration of the Capitalist World-Ecology in the Twenty-first Century”

The contemporary ecological crisis poses a dire risk for the human and extra-human natures in the world. Regarding this issue, there has been a growing concern on the relationship between the

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contemporary ecological crisis and capitalism as a world-system, both in the scholarly domain as well as in political activism. Less common in social sciences scholarship is those who ask the if the contemporary ecological destruction can destabilize capitalism worldwide to such an extent as to pose an existential threat for its existence. So far, there is no consensus on this issue within the academic scholarship, we do not know if capitalism can survive through internal reconfigurations or whether capitalism as a world-ecology is transitioning or disintegrating into other system(s) as a result of the ongoing environmental destruction potentially turning into a systemic constraint for the reproduction of the system. This avenue of inquiry is the topic of my research.

Regarding this, I ask the following questions to guide my research: How is the modern-day production of a green capitalism discourse serving the reconfiguration of the capitalist world-ecology? Who are the primary actors of this reconfiguration? Is there a hegemonic power that is trying to reconfigure the capitalist world-ecology through this green capitalism discourse? What kind of a world are the leading actors of the capitalist world-ecology conceiving that they would like to construct?

My aim in conducting this research will be to discover the hegemonic discourse of green capitalism by analyzing the ideologies, policies, and actions of those actors who produce this project, as well as those actors who provide critiques, in order to highlight what shared assumptions and views exist on this issue in the public and scholarly domains. The aim in analyzing this discourse is also to explain the world-ecological praxis of the capitalist world-economy, how it has functioned through capital, empire, science complexes, how it has resulted in the contemporary ecological crisis, and what is being done and proposed to “govern” this problem from the point of view of the capitalist world-ecology.

One point that I would like to make is that so far under the neoliberal era, the capitalist world-system has not identified or appropriated new Cheap Natures at a sufficient level, nor created a global environmental governance regime to ‘govern’ the ecological crisis to ensure that socioecological constraints do not become a serious problem for endless accumulation of capital.

Cheap Nature is the name of a strategy developed in the ‘long’ sixteenth century (1450-1640) of appropriating massive amounts of labor-power, food, energy, and raw materials for little or no cost to sustain and enhance endless accumulation of capital. This strategy has identified and exhausted Cheap Natures as inputs in every ‘long’ wave of capital accumulation in the history of capitalist world-ecology, resulting in the exhaustion and destruction of “Nature” that we face today.

A key factor here is the cumulative effects of appropriation of Cheap Natures that, through positive feedback loops, have immensely unbalanced the geophysical cycles of the Earth, for example causing global warming. Through the disruption of these geophysical cycles, the Cheap Nature strategy has come to potentially endanger the creation of necessary conditions for capital accumulation within the capitalist world-ecology, and to reproduce itself at a systemic level as Cheap Natures through contemporary ecological crisis are becoming less and less “Cheap”. Global warming, biodiversity loss, deforestation, ocean acidification and many other problems are thus born from the logic of appropriating Cheap labor-power, energy, food, and raw materials for endless accumulation of capital.

What lies behind the formation of this strategy is capitalism’s law of value. The rise of negative value in capitalist world-ecology stems from climate change as a cumulative and systemic bottleneck which can make the current conjuncture ripe for a potential epochal crisis if the green capitalist discourse/policies fail to address this. As such, the failure of neoliberalism as a regime of governance and accumulation for sustaining capitalism in the long term is visible. Thus, we can suggest that capitalist world-ecology is at a turning point. Here, we can identify the production of the discourse of green capitalism as a tentative project to address these issues. In a world-ecological sense, this discourse can be understood as a tentative project for the creation of a new world-

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ecological regime. For this reason, research on the green capitalism discourse is of utmost importance to analyze the current conjuncture of the capitalist world-ecology and its future trajectory in relation to the global ecological crisis.

Capitalism as a world-system has developed through overcoming crises and expanding its capacity to produce value. The inability to expand the production of value however can result in a systemwide crisis. Seen through a world-ecological standpoint, capitalism has throughout its existence succeeded in overcoming periods of crises or stagnation through identifying and appropriating Cheap Natures, as well as creating and consolidating new world-hegemonic regimes. The Dutch Republic in the 'long' seventeenth century (1560-1740) succeeded in doing this through creating and appropriating new Cheap Natures. Through its hegemonic ascendance in the capitalist world-economy, it was able to legitimize its accumulation regime and become the leading center of the capitalist world, through adapting to the socioecological instabilities created by the Little Ice Age. Great Britain, similarly, was able to achieve world hegemony and expand on the Dutch hegemonic regime through appropriation of new sources of Cheap energy, raw-materials, labor-power, and food, in the 'long' nineteenth century (1763-1945). And today, we are observing the inability of capitalist world-ecology to "govern" the contemporary socioecological instabilities in any significant manner signaling to the existence of another period of crisis.

In summary, I argue that the root cause of our contemporary ecological crisis lies in the endless accumulation of capital. The "exhaustion" of Cheap Natures results in the rise of socioecological constraints to endless accumulation of capital and thus to production of value. There are no longer Cheap Natures of sufficient scales because new frontiers of Cheap Nature are becoming increasingly sparse or cost prohibitive as a result of contemporary socioecological constraints. Thus capitalism, by creating a planetary crisis, has created the conditions for its own crisis as a historical system. The current ecological crisis can turn into a systemic crisis of capitalism if no sufficient political and economic solutions are put forward by hegemonic actors, which is where the discourse of green capitalism comes in. Since without these solutions and without global political leadership to govern climate change and identification of new Cheap Natures to sustain endless accumulation of capital, the production of value falters systemwide, leading to a systemic crisis.

Adding on to the systemic faltering of value production, the lack of appropriate political projects can become the impetus that leads populations all over the world towards anti-systemic movements. Coupling a worldwide intensifying class struggle with a systemic crisis of value can lead to an epochal crisis of capitalist world-ecology as a historical system, hence the importance of analyzing whether a green capitalist world-ecology regime is being created today. The concept of world-ecological revolution/regime can help explain the relationship between the constant creation of socioecological constraints to endless accumulation of capital and the development and expansion of capitalist world-ecology as a historical system, thus helping us conceptualize the green capitalism discourse as a tentative world-ecological regime for the twenty-first century.

Keywords: Green Capitalism, Discourse Analysis, World-ecological regime, Cheap Nature

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“ColPaMon. Participatory Monitoring of environmental conflicts in Colombia”

ColPaMon is a project about participatory monitoring in Colombia, South America that aims to explore alternatives to understand and to give responses to environmental conflicts in this country involving a variety of stakeholders in the process. The environmental conflict is understood not as an isolated process but as a product of the historical environmental change in territories where there are disputes, for natural goods, for land, for life. We understand the concept of environment not as a physical scenario or space where the historical conflicts are located but as the coevolutionary product of historical nature-society relationship in the locations of conflict. The idea of nature-society relationship of this perspective of environment and environmental conflict is not rooted in division but in a deep connection through the web of life.

We want to overcome the binary thinking in understanding human–nature relationship by including local and embedded perspectives into knowledge production and decision-making process. In the context of these ideas, the process of understanding and giving responses to the environmental conflict in Colombia has been a process of addressing conflictive human-nature relationship from a holistic perspective and also as product and process of the “web of life”. In this web of life in which humans and nature are intrinsically connected, the experiences of local communities, who live (and have lived) the conflicts are not just mere knowledge sources but essential to design different futures and a more just and dignified life.

The first phase of the Colpamon project was carried out in 2021 and developed two workshops and other virtual meetings with different stakeholders; academia, local communities and non-governmental organisations (NGO) who are directly related with participatory monitoring, not only in Colombia but also in other Latin-American regions such as Mexico and Bolivia. The second phase of the process begins in 2022 and will look to support the process of participatory monitoring in the different and complex environmental conflict scenarios. Specifically, the second workshop developed in November of 2021 gave us a better perspective of the global entanglements of power relations, production systems and natural conditions that lead to environmental conflicts. Together with actors of civil society organizations we approached four specific cases: i) Lipa Wetland in the east region of the country (Arauca Department) related with hydrocarbon exploration and exploitation, ii) The region of Tasco in the centre of the country (Boyacá department) related with coal mining, iii) The indigenous community Emberá-Chamí in the coffee region of Risaralda related with gold mining and iv) Galilea Forest in Tolima region related with agrarian reforms and hydrocarbon exploration and exploitation.

In this presentation we want to share insights about how environmental conflicts in Colombia intertwine with colonial legacies, asymmetric power relations and forms of capitalist accumulation and exploitation. The participatory monitoring processes in the mentioned specific cases show the embeddedness of local conflicts into these global human-nature relationships that have led to the current environmental and planetary crisis scenario. It also calls on the academic engagement with diverse forms of knowledge production and decision-making processes to better understand their contribution to a more equitable future. It is impossible to imagine World Ecology Literature without the Latin American debates on decolonized environmental research and education, at least since the outstanding works of Anibal Quijano or Enrique Dussel. With these very specific case

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studies of participatory monitoring, we show that a transdisciplinary opening of critical theory and extension to diverse approaches, meanings and solutions is essential for transformative and translational action and for addressing these environmental conflicts.

Keywords: environmental conflicts, asymmetric power relations, capitalist accumulation and exploitation, Colombia

Z

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“The military dictatorship in Chile as a way of organizing Nature. The case of copper mining (1977-1983)”

Seen from the point of view of copper mining, the 1973 coup did not produce a radical break with the Popular Unity period. The fundamental break with the previous period began to take shape with the gradual but increasingly consistent development of a new capitalist accumulation project from the second half of the 70s. During these years, copper mining experienced a new boom, which had the condition of expanding the frontiers of accumulation that had prevailed until then. These large capitals, mainly of US origin, began a new cycle of appropriation of nature, energy and cheap labor due to the institutional changes made by the dictatorship and the loss of power of the working class. This new cycle of appropriation, which originated approximately between 1976-1983, was sustained by the strengthening of private property and the commodification of new territories, including glaciers, water systems, ecosystems, biodiversity, etc. This dynamic, which was the result of the relocation of Chile in the world-ecology and which allowed transnational corporations to access new sources of cheap nature, shows how the neoliberal expansion in Latin America and the rise of modern copper mining, they were (and are) a process that occurs at all times through the appropriation of the rest of nature. In fact, this new "frontier expansion" was the basis for the takeoff of copper as the main activity in Chile.

Keywords: Military dictatorship, Cheap nature, Frontiers of acumulation, Way of organizing nature