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SPECIAL FEATURE: EDITORIAL

Alternatives to sustainable development: what can we learn from the pluriverse in practice?

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Abstract

The debates on the sustainability of development have a long history. Although the Brundtland Report popularized "sustainable development", this slippery concept sidelined previous critiques of development and has been compatible with a wide range of conflicting agendas. A notable example of this contradiction is the uncritical promotion of capitalist growth in the pursuit of social justice and ecosystem health by the sustainable development goals. In contrast to this reliance on the "one world" of Euroamerican market economies, this special feature presents 12 case studies of "alternatives to sustainable development". These case studies question the anthropocentric universalism of the development project and enact radically different relational ontologies, often gathered under the conceptual umbrella of the "pluriverse". They focus on territorial, community, and network initiatives that intend to move methodologically beyond discourse analysis with a situated and empirical analysis of how pluriversal practices might flourish as well as generate tensions. We identify three frictions with capitalist modernity emerging from these contributions: (1) how alternatives to sustainable development relate to state institutions, (2) how they engage with the distribution of surplus, and (3) how they unsettle scientific epistemologies, at times regenerating past resources—and at other times radical futures. With this special feature, we hope to re-politicize the debates on the science and practice of sustainability, and weave the contributions of anticolonial and indigenous science studies into neo-Marxist and post-development critiques.

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Introduction

Imagination is…a tool, a resource, a necessary part of staying alive…the nightmares that many people are forced to endure are the underside of elite fantasies of efficiency, profit, security, and social control. Racism among other axes of domination helps to produce this fragmented imagination: misery for some, monopolies for others. This means that for those who want to construct a different social reality, one that's grounded in justice and joy, we can't only critique the underside – the world as it is – we have to work on building the world as it should be. This is what it means to stay alive.

Ruha Benjamin, "Reflections on how the pandemic is a portal" (2020)

How might humans ensure "good lives' for all within planetary boundaries? Can they? A widely cited article in *Nature Sustainability* has demonstrated that "no country in the world currently meets the basic needs of its citizens at a globally sustainable level of resource use" (O'Neill et al. 2018). On the one hand, scientific consensus demonstrates

that the world economy is becoming less and less sustainable every year; on the other hand, mainstream solutions seem less and less credible in their ability to address the planet's pressing sustainability questions. Indeed, mainstream understandings of sustainable development—whether they are called green or circular economy, sustainable development goals (SDGs) or even Green New Deals—sound like techno-utopian fantasies when they assume that it is possible for an economy to grow while simultaneously decreasing ecological impacts (Hopwood et al. 2005; Parrique et al. 2019). In these dire circumstances, where to look for hope?

Instead of building on understandings of sustainable development which draw from Euroamerican assumptions—what we call "one-world sustainable development"—this special issue seeks to explore *alternatives to sustainable development* which enact multiple worlds—that is, a "pluriverse". We contend that historical and existing initiatives, practices, and worldviews that diverge from dominant development discourses like the SDGs provide diverse, complex, and rich empirical examples from which to learn. We enter these debates in conversation with previous special features in this journal on degrowth (Asara et al. 2015), environmental justice (Temper et al. 2018), and blue degrowth (Ertör and Hadjimichael 2020), which aspired to re-politicize debate about the sciences and practices of sustainability.

Recent COVID-19-related upheavals are testimony to the fragility and unsustainability of present socioeconomic, political, ecological arrangements on the planet (Büscher et al. 2021). But the rupture of the pandemic has also provided an opportunity to slow down and reconsider the situation that has generated the current interrelated crises rooted in historical processes of exploitation based on class, caste, race, gender, and species. We hope that the capacity to witness exploitation might expand—as well as efforts to repair it. Together with those who affirm that "we shouldn't get back to normal because normal was the problem", we believe that it is a relevant time to consider what "alternatives" might tell us about regenerating planetary relationships.

As public climate change concerns have grown since the 2000s, alternatives to sustainable development provide opportunities to politicize debates around how to effect socio-ecological transformation. As US- and Colombia-based anthropologist Arturo Escobar (2011: 139) has argued: "Some of today's struggles could be seen as reflecting the defense and activation of relational communities and worldviews… and as such they could be read as ontological struggles; they refer to a different way of imagining life, to an other mode of existence." Drawing from neo-Marxist, post-development, anticolonial, and science studies approaches, we suggest these case studies demonstrate attempts to delink from the one-world universalism of sustainable development to expand on the multiplicity of worlds possible—a pluriverse of alternatives to sustainable development. The activist and academic curation of transformative initiatives under the concept of the pluriverse—"a world where many worlds fit" in the words of the Zapatistas (EZLN 1996)—reflects the desire to amplify multiple practices of collective well-living rather than the imperialist, unilineal, and anthropocentric expansion of capitalist modernity,[1] working across temporalities with resources of the past and future imaginaries to deliberate on present situations.

At times, such alternatives to sustainable development become grounds for political action that go beyond their immediate contexts. Political ecologists have distinguished them from superficial "sustainability solutions" in three ways: (1) in attempting to transform the structural roots of a problem along political, economic, social, cultural, and ecological axes, (2) in questioning the core assumptions of the development discourse (i.e., growth, material progress, instrumental rationality, the centrality of markets and economy, universality, modernity and its binaries), and (3) through enacting a radically different and more relational set of ethics than those that have constructed the dominant world system (Demaria and Kothari 2017).

Much has been written about such "alternatives", often with an attention to their words (discourses) rather than what work these words and collectives do (practices). This is why we focus here on the promises and frictions emerging from the "pluriverse in practice". These examples of the pluriverse hardly denote a monolithic, homogenous group of subjects empty of friction. How do people with differentiated power relations and intersectional interests work together to enact "alternatives to sustainable development"? How can radical projects avoid reproducing patriarchal and colonial continuities? What do these cases across the global North and South have in common, and what remains uncommon? Anthropological techniques can regenerate sustainable development studies through their emphasis on participant observation and praxis. An attention to collectives also potentially unsettle the methodological nationalism—or the tendency to reify nation-states as the key unit of analysis—that lingers in the field of sustainable development studies.

The 12 case studies of alternatives to sustainable development articulate their complexities, successes, and potentially frictive "surfaces of engagement" with capitalist modernity (Escobar 1999). Their scale of action varies widely. Some

[1] Amplified through the work of Kurdish political prisoner Abdullah Öcalan (2017), the concept of 'capitalist modernity' traces the dimensions of the current hegemonic political–economic system that go beyond economic relations into the political and ideological realms under six key headings: (1) individualism, (2) unlimited wants, (3) instrumental rationality, (4) commodification of human and nonhuman life, (5) moral and legal claims of the nation-state on the individual, and (6) separation of humans and nature (see also Marglin 2006).

of these examples are embedded in projects of territorial autonomy, while others are community initiatives or more diffuse networks. They share efforts to delink from commodity chains where possible and to relink to practices of care for humans, nonhumans, and more-than-humans that suggest the centrality of relational values. The "pluriversal" concepts range from community economies, agroecology, solidarity economies, alternative currencies, ecovillages, democratic economy, Zapatista autonomy and *sumak kawsay*. The contributions present a range of geographical and historical case studies, and span transnational networks, self-help groups in Andhra Pradesh and West Bengal, agroecological peasant networks in Haiti and Tanzania and drug users in Tehran, ecovillages in the Yucatan of Mexico, grassroots innovation for the pluriverse in Chiapas, municipal indigenous politics in Cayambe Ecuador, solidarity economy networks in Massachusetts, black rural cooperatives in the southern US, cryptocurrencies in Berlin, and community credit in Chiloe, Chile.

The contributors to this special feature work with empirical material differently, as do the editors—whose backgrounds differ in geographical locations as well as disciplinary repertoires from political economy, political ecology, critical geography, social anthropology, and feminist science studies. We come from uncommon disciplines, languages, historical positions, and even use the term pluriverse differently, yet made time to labor slowly towards a common goal in this special feature on the "pluriverse in practice". We recognize that activists and researchers might embody the questions this special feature addresses without using concepts such as the pluriverse and alternatives to sustainable development, and we do not intend for these words to become academic brands. Instead, as activist-researchers working between the global North and South, we present these concepts with hope that they might be of use to other collectives seeking to dialogue with critical development studies in constructive ways.

In this editorial, we start by tracing the history of sustainable development and contextualizing it within early ecological critiques of development. We turn then to "alternatives to development" as a distinct field within development studies, tracing its links with dependency theory and post-development theory. We also introduce the 12 case studies included in this special feature. In "Generative frictions with capitalist modernity: states, surpluses, and sciences", we identify three frictions in the relationship between alternatives to sustainable development and "capitalist modernity": (1) how alternatives to sustainable development relate to state institutions, (2) how they engage with surplus distribution, and (3) how they unsettle scientific epistemologies, at times regenerating past resources—and at other times radical futures. In the final section, we place this special issue in the context of interrelated crises and calls for action.

Situating alternatives to sustainable development and the pluriverse

Who is afraid of sustainable development?

The concept of "sustainable development" has in some ways displaced previous ecological critiques of development. Ecological economists and political ecologists already problematized the (un)sustainability of development as early as the 1960s and 70s (e.g., Kapp 1963; Georgescu-Roegen 1971; Daly 1972). The school of "ecodevelopment", which emerged around the same time, launched one of the first reactions to the idea of development as a unidirectional, homogenizing, market- and growth-based process originating in the global North (Sachs 1993), and instead emphasized self-reliance, environmental embeddedness, appropriate technologies and satisfaction of basic needs. Ecofeminists formulated an equally forceful early critique, drawing attention to the ways in which development processes depend on the invisibilized and undervalued labor of women and nature, and articulated alternatives such as eco-sufficiency, provisioning, and the subsistence perspective (Salleh 2009; Mies and Bennholdt-Thomsen 1999).

After the landmark publication of *The Limits to Growth*, these substantive critiques were side-lined by the neoliberal turn, and paradoxically, by the popularization of "sustainable development" through the social democratic defense of economic growth in the Brundtland Report (Lélé 1991). This turn was marked by three shifts in which sustainable development was implicated: (1) the framing of economic growth as the solution to environmental problems, (2) primacy of private initiatives and market-based instruments over public regulation, and (3) a technocratic approach to sustainability that displaced the political content of earlier global environmental declarations (Gómez-Baggethun and Naredo 2015). In short, sustainability principles were reshaped to fit dominant neoliberal discourses emphasizing markets and economic growth (Rees 1998).

Given that both environmental outcomes and socio-economic inequities have been worsening over the last decades, some political ecologists have called to abandon "sustainable development" as an empty agenda (Martinez-Alier et al. 2010). Others have advocated it as an important anchor—a guiding institutional principle, a concrete policy goal, and a focus of political struggle (Sneddon et al. 2006). Perhaps the most significant point of contention has been on the inherent tension between the concept's commitment to economic growth and its claim to realizing environmental sustainability. While the unequal and environmentally harmful effects of growth have been recognized, especially in the earlier ideas formulated by

ecodevelopment, the faith in economic growth per se is never given up. It is only that a different kind of growth is called for, one that is inclusive and green, in the sense that meets essential needs and merges environmental considerations with economic ones (WCED 1987). This tension has given rise to an ongoing debate on the compatibility of economic growth with ecological sustainability, and particularly the role of technology in addressing the adverse environmental impacts of growth.

The contradiction between growth and sustainability is evident in the United Nations SDGs (Hickel 2019). On the one hand, the SDGs call for humans to achieve "harmony with nature" and to protect ecosystems, with specific targets laid out in Goals 6, 12, 13, 14, and 15. On the other hand, the SDGs' Goal 8 calls for continued global economic growth equivalent to 3% per year. The faith in aggregate global economic growth as the best way to achieve human development objectives lies at the root of the entire SDGs' edifice, as evidenced by its framing of economic growth as a goal in itself, rather than at most a means to achieve the other goals.

A comprehensive treatment of the SDGs—or other visions that mobilize the notion of sustainable development—is beyond our purposes here. Yet we use it as an example to emphasize that without a complex understanding of the wicked structural roots, drivers, and responsibilities regarding the problem of sustainability, it will be difficult—if not entirely impossible—to arrive at effective solutions. For example, the ways in which the SDGs are articulated into targets and indicators presupposes a one-world perspective, i.e., a singular understanding of what a good life means, often corresponding to a particular set of Euro-American norms. These targets risk not only cultural imposition, but also—and paradoxically—an expansion of a socio-economic network and lifestyle that has proven to be ecologically unsustainable. These kinds of common assumptions explain why this special feature is framed on the "alternatives to sustainable development", and not simply on the "alternatives to development".

Why "alternatives to sustainable development"?

The term "alternatives to development", as distinct from "alternative development", first arose in the 1990s within a body of work later dubbed "post-development" theory. The latter emerged in the wake of debates between two of the main lineages within development studies: modernization theorists, who postulated a process of "catching up" by "underdeveloped" countries through economic modernization (North and Thomas 1973; De Soto 1989), and neo-Marxist dependency theorists, who argued that development in the industrial core is inherently tied to underdevelopment in the periphery (Offiong 1982; Amin 1990; Ake 2001; Gendzier 1995). The debate persisted throughout the 1980s into the 1990s, based on competing visions of the causes of underdevelopment and, in turn, how to achieve development. In contrast, early post-development theorists used post-structural and post-colonial analytical tools to critique development itself as an ideological discourse. Writing from the contexts of South Asia, Europe, and the Americas, they questioned colonial forms of knowledge and modern principles of productivism that obscured continuing economic exploitation (Nandy 1987; Shiva 1988; Latouche 1986; Marglin and Marglin 1990).

Within this post-development context, Arturo Escobar (1991) offered an early distinction between "development alternatives" and "alternatives *to* development" based on four interests: (1) a critical stance towards hegemonic scientific discourses, (2) the rejection of "ethnocentric, patriarchal, and ecocidal character of development models", (3) the defense of "pluralistic grassroots movements," and (4) a desire to work on truth–reality relationships different from that of Western modernity (ibid., p. 675). We find this distinction useful to assert that "other worlds are possible" in the context of rising neoliberal insistence that "there is no alternative" to capitalist modernity, and to flag naturalizing colonial metaphors.

In some ways, the term "alternative to sustainable development" risks saying too much and too little at the same time. Activists and scholars use "alternative" to describe experiences ranging from small-scale solidarity economy initiatives to entire regions like the Autonomous Administration of North and East Syria of Rojava, or the Zapatistas' Chiapas region in Mexico. A few "alternatives" have even become foundational to state development discourses—such as *Buen vivir* in Ecuador or Gross National Happiness in Bhutan—with complex and sometimes contradictory results in practice as the lines between "mainstream" and "alternative" blur (Arsel and Dasgupta 2015; Radcliffe 2015). Other "alternatives" authors identify are not necessarily practiced in a specific site—such as Radical Ecological Democracy in India (Kothari 2014), Degrowth in Europe (Demaria et al. 2013; Kallis et al. 2020), or Ubuntu in Southern Africa (Ramose 2002).

More recent works in post-development theory have emphasized the frictions and heterogeneities within the field (Escobar 2015; Nanda 1999; Ziai 2004, 2015), as well as the risk of presenting development as a monolithic western set of ideas and practices, rather than as a multiplicity of meanings and practices (Mitchell 2002; de Sardan 2005; Venkatesan and Yarrow 2012), overlooking that development discourses are themselves "heterogeneous, contested and constantly changing" (Gardner and Lewis 1996, p. 125). Some anthropologists of development have also warned of the static conceptions of culture among post-development theorists, pointing out the risk of post-development

Table 1 Overview of the 12 contributions to this special feature (papers in order of appearance in this special issue)

Authors	Topics	Geographies	Kind of alternatives
Linares and Cabaña	Democratization of money	Chile and Germany	Territorial
Clarence-Smith and Monticelli	Decision-making in an ecovillage	India	Community
Gills and Hosseini	Commoning spaces	Global	Network
Naylor	Fair trade and non-capitalist community economy	Chiapas and USA	Network
Loh and Shear	Solidarity economy	USA	Network
Schöneberg et al	Peasant and community organizing	Tanzania, Haiti, and Iran	Community
Morris	Intentional eco-communities	Mexico	Community
Franzen	Network of Southern black farmers	USA	Network
Saha and Kasi	Women self-help groups	India	Community
Piccardi and Barca	Women's science	Rojava	Territorial
Lang	Municipal reforms by indigenous people	Ecuador	Territorial
Maldonado-Villalpando et al	Grassroots innovation in autonomous Zapatista education	Chiapas	Territorial

projection of romantic images onto grim lives in some "alternatives to development" (Kiely 1999; Gerber 2020).

Methodologically, a persistent issue raised between anthropologists, geographers, and historians discussing alternatives to development is the need to situate in space and time the actors involved (Kallis et al. 2022). Post-structuralist emphasis on discourse analysis in critical development studies has been key in drawing attention to how colonial discourses travel and normalize ideological consent for uneven development. But it is less useful when studying how uneven development is done in practice, what alternatives there are to it, and how they could flourish. Ethnographic methods tend to practice, and offer the possibility to understand how universalizing ideas meet with friction in context of multiple epistemologies that might end up being generative. This special feature is a walk in this direction, to understand what the contingent coalitions gathered under the conceptual umbrella of alternatives to sustainable development might contribute to shared concerns about the uneven impacts of a development project based on capitalist modernity.

As climate change concerns mounted in the 2000s, critical development studies' authors shifted their focus from "alternatives to development" to "alternatives to sustainable development" (Kothari et al. 2014). But Escobar (2012, p. xxxiii) went one step further by proposing pluriversal studies, a different intellectual project to study "worlds and knowledges that the sciences have effaced or only gleaned obliquely". He presents a struggle between globalization that spreads "capitalist modernity" and a planetarization that manifests the manifold relationships of the "pluriverse" (ibid., p. xxxiii). Pluriversal studies have thus become one way to move beyond post-development critiques. Authors using the concept of the pluriverse build on dependency theory critiques of uneven development, but draw constructive influences from complexity theory, decoloniality, and indigenous science studies. This approach also attempts to avoid the lingering methodological nationalism in development studies by following collectives that seek to delink from what sociologist of science John Law (2015) calls a Northern one-world ontology based on the division between nature and culture.

Generative frictions with capitalist modernity: states, surpluses, and sciences

The authors in this special feature present a range of case studies of alternatives to sustainable development situated in complex institutional and historical contexts (see Table 1).[2] These initiatives demonstrate multiple scales of "pluriversal" practices: territorial initiatives like in Rojava, Chiapas, Cayambe, and Chiloe, community initiatives like Auroville, women's self-help groups, and Yucatan ecovillages, and network initiatives like the Federation of Southern Cooperatives, Mouvman Peyizan Papaye, fair trade coffee networks, and the People's Sovereignty Network. The articles range in ethnographic style from participant observations of agroecological water churning (Morris, this special feature) to historical accounts of community currencies (Cabaña and Linares, this special feature) to narration of sumak kawsay municipal reforms (Lang, this special feature).

[2] Find the original call for papers titled "Alternatives to development: What can we learn from concrete experiences? Past, present and future of the Pluriverse" here: https://degrowth.org/2020/02/14/call-for-papers-alternatives-to-development-what-can-we-learn-from-concrete-experiences-past-present-and-future-of-the-pluriverse/.

In these 12 case studies, we identify three frictions with capitalist modernity: how these collectives relate to (1) state institutions, (2) surplus distribution, and (3) scientific epistemologies, at times regenerating past resources—and at other times radical futures. Actors engaged in transformative initiatives like agroecology, community currencies, and *sumak kawsay* are not living in utopias isolated from imperialist market flows of capitalist modernity. In some cases, they assert their historically obstructed right to access state resources and land in the form of subaltern development initiatives—particularly in the Black belt of the southern US and among Dalit, non-dominant caste, and Adivasi collectives in southeastern India. The authors emphasize the effort to delink from "one-world" commodity flows and relations of monetary valuation and relink or regenerate practices of care—for humans, multiple species, and more-than-human beings—that suggest the significance of commoning (Caffentzis and Federici 2014), matters of care (de la Bellacasa 2017), and sciences from below (Harding 2011) to the pluriverse in practice. We briefly summarize the different contributions to this special feature in the section that follows.

States

Authors in this special feature engage with questions about collective decision-making as well as how to defend territorial autonomy from transnational capital flows and neocolonial state relations. Their accounts raise debates around if and how to engage with state institutions. Transformative initiatives seek state recognition or resources in some of the cases here, but several make use of their marginalized position relative to state centers of power to practice prefigurative politics. There are historical reasons for collectives to be allied with non-state-centric politics if "modern development was a process of nation-building" (Visvanathan 2006, p. 166). Popular struggles have emerged with state domination itself, and were characterized by strategies of flight and evasion as much as violent confrontations (Scott 2009; Grubačić and O'Hearn 2016; Zibechi 2010). Authors of these case studies do not narrate what Wright (2010) calls practices of "ruptural" politics (a single revolution) or "symbiotic" politics (gradual change at the policy level). They relate the collective reproduction or anti-capitalist commoning of resources in relatively autonomous zones within existing dominant networks (Caffentzis and Federici 2014). In this "interstitial" approach to political change, autonomous zones would expand, differentiate, self-organize, and connect with each other, not necessarily via policymakers (Wright 2010). Sustaining and connecting interstitial initiatives become difficult when defending against police and military violence like in Rojava and Chiapas, which is why remaining invisible to state actors might be an advantage.

Modern money is an emblematic invention of the colonial state and a strategic site of intervention for pluriversal possibilities. Cabaña and Linares (this special feature) focus on local money systems rooted in relations of care. Against the backdrop of monetized labor's destruction of non-capitalist relations on a Chilean island, the authors explore what could be built instead by drawing on the example of a basic income scheme "from below" in Berlin, Germany. They argue for democratization of money as a key enabler of the pluriverse, against current monetary systems' narrowing of economic values to the binary of production and consumption.

Clarence-Smith and Monticelli (this special feature) present a study of decision-making in Auroville township, India—one of the largest and one of the longest-standing municipal utopian experiments in the world. The authors examine how the initiative's autonomy is maintained and developed within the Indian state system, as well as whether collectives can become "flexibly institutionalized" while retaining their alternative character. The authors define Auroville as an example of a "prefigurative" alternative: a laboratory that embodies a future sustainable vision in the present.

Gills and Hosseini (this special feature) address the question of state within the tension between unity and diversity in pluriversal politics, and point to the necessity of a "commonist" project, beyond unproductive divisions in the so-called pluriverse. They offer a fourfold meta-ideological framework to promote sustainable convergences and solidarities beyond temporary pragmatic coalitions and alliances. Commonism is an organizing civilizational project to create commoning spaces where integral models of transforming the state, community, the more-than-human ecology, and the economy are developed, and strategies to implement these radical models are defined and implemented. Based on experience with the People's Sovereignty Network and reflections on Rojava, the authors show that practices comparable to the commonist framework are already being experimented with.

Surpluses

Several of the case studies present collectives that discuss what to do with what is generated from pooled resources, raising questions about surpluses, social relations, and economic growth. Social reproduction requires a "surplus" product above what is required for immediate consumption, often for maintenance or ceremonial purposes. This vital surplus comes from human and nonhuman activity such as photosynthesis. The capacity to appropriate this surplus can signal relations of exploitation based on unequal power or ownership rights. These processes of appropriation, exploitation and accumulation enact the "one-world world", powerful networks of capitalist universalism (Harvey 2018).

How to escape them, or exist within and against them? How to organize social relations of production and reproduction differently? What are the frictions posed by the capitalist organization of surplus, and in turn, what are the spaces of opportunity that might be found within it? These are central questions of anti-capitalist pluriversal politics.

The centrality of relational values of care and solidarity in organizing surplus is echoed across different contributions to this special feature. Naylor (this special feature), focusing on the fair trade network between coffee cooperatives in Chiapas, Mexico and coffee roasters in the US, argues that this relationship, while couched in a capitalist economic exchange, can be conducive to building ways of non-capitalist being and doing. The author shows how the performance and practice of solidarity fostered building sustainable and dignified livelihoods by campesinos/as. Naylor considers the forming of a non-capitalist community economy (a community kitchen, a coffee bodega and an abarrote) emplaced in Chiapas but comprising relations extending through the solidarity network in the US.

Loh and Shear (this special feature) similarly take the "economy" to be a diverse and messy field of possibility rather than a fixed reality. The authors locate the solidarity economy (SE) within this understanding, highlighting the ways in which it "invites, but does not guarantee" a politics and practice of the pluriverse. Drawing on engaged research on solidarity economy history and happenings in Massachusetts, the authors trace the emergence of a politics that has the potential to operate as an alternative to sustainable development—where the ontological dictates of capitalist modernity are rejected and the conditions for enacting solidarity, autonomy, and relations of interdependence are advanced as "matters of care".

Schöneberg et al. (this special feature) while emphasizing the different and geographical contexts of post-development, weave strategies of reciprocity, solidarity, and commoning as the thread that connects them. The authors study various forms of peasant and community organizing in Tanzania, Haiti, and Iran, and investigate the ways in which they can be considered transformative and non-hegemonic. In doing so, they focus on the extent to which their strategies serve as mere means for survival, provide alternative pathways for societal and economic transformation, or both. Matters of care are also central to the contribution by Morris (this special feature) who proposes to rethink the notion of "profitability" drawing on the experience of two Mexican intentional eco-communities. The author argues that the ecovillagers seek to understand "surplus" or "profit" in a way to include care towards nonhuman lives, and constantly negotiate between idealized understandings of socio-ecological harmony and the realities of applying their conception of profitability.

Removing the expectation that alternatives be "profitable" in a conventional sense allows them to be seen as sites of productive experimentation, "path of resistance to follow" rather than as "scalable models" to be replicated. Scalability is the main tension around organizing surplus picked up by Franzen's study of the Federation of Southern Cooperatives/Land Assistance Fund (this special feature), a network of small farmers in the Black Belt of the southeastern US. The author demonstrates how supporting each other in a region dominated by large-scale agricultural producers and anti-black institutional spaces can simultaneously mean asserting access to state interventions and refusing this vision to pursue a Black development ideology. In the goat farming cooperative Franzen studies, for instance, members deliberate on whether to pool resources to "scale up"—deciding to forgo higher profits that would maintain their intergenerational relationship and care for nonhumans. Saha and Kasi (this special feature) share a comparative case study of self-help groups organized to facilitate access to pooled credit among Dalit and non-dominant-caste women in Andhra Pradesh and Adivasi women in West Bengal. Though the Indian state lauds self-help groups as examples of decentralized "sustainable development", the authors observe that dominant caste networks and concentration of land ownership obstruct women's sustained participation in some cases of these cooperative initiatives.

Sciences

Colonial technoscience has played an instrumental role in successful profit extraction of the one-world world, which involved actively "de-developing" diverse knowledge systems around the world often stewarded by women (Rodney 2018; Shiva 1988; Öcalan 2017; Harding 1993; Kothari et al. 2019). The project of developmentalism "was predicated on a social contract between [colonial] science and the nation-state", in which Euroamerican technologies were transferred from metropolis to periphery (Visvanathan 2006, p. 166). Working within and against the Enlightenment legacy, Harding (2011, p. 6) argues for the value of recognizing a "world of sciences—that is, multiple scientific and technological traditions" that interact with each other, and that modernity is not only disseminated from the West but from each society. Feminist and postcolonial technoscience projects should be multiple and distinctively localized if they are to serve those escaping male- and Western-supremacist unitary histories of science (Harding 2011). From a postcolonial feminist science stance, addressing climate change, pandemics, migration, racism, and fundamentalism will require struggling with the epistemological and ontological "unity of science" approach of capitalist modernity that generated these problems by neglecting care for human,

nonhuman, and more-than-human collectives. Validating non-colonial ontologies and "epistemologies of the South" (de Sousa Santos 2014) becomes a form of epistemic justice that lays the groundwork for regenerating the pluriverse, a world of many worlds.

Several authors in this special feature share case studies in which collectives draw from intergenerational practices of healing or growing food that actively resist dominant techno-scientific practices of agriculture and medicine. Indigenous and subaltern women are key agents in these efforts. Piccardi and Barca (this special feature) foreground the significance of *jineolojî*, "women's science", a body of knowledge which recovers matristic heritage of the Mesopotamian region for the Democratic Confederalist model of government as currently practiced in Northern and Eastern Syria. Putting at the center de-patriarchalization, they argue matristic culture is distinct from an essentialist, universalizing and Eurocentric perspective. *Jineolojî* is a radical critique of the scientific methods and epistemologies of capitalist modernity that they argue regenerates women's historical contributions to the praxis of liberation and what Kurdish women's movement call "democratic modernity". The traces of jineolojî include 40% quotas and women co-chairs in decision-making, but also a pedagogical system that is promoting the emancipation and autonomy of women, the recovering of their reproductive practices and ancestral knowledge, the communalization of life and earth/care work, and deconstruction of toxic masculinities.

Miriam Lang (this special feature) illustrates how the kichwa ethic of *sumak kawsay* of Cayambe county in Ecuador values in practice good coexistence focused on the quality of relationships between humans and non-humans. The first indigenous kayambi mayor of Cayambe has revived sumak kawsay practices of assembly-based decision-making, collective labor *mingas*, collective land titles, *crianza sabia* pedagogy, indigenous gender justice—in addition to modern water treatment centers. Though multiple profit-oriented agricultural networks exist in Cayambe, the mayor's new ordinance promotes spaces for small-scale women's agro-ecological practices and local organic certification because it provides food for households and promotes quality relationships between humans and nonhumans.

Maldonado-Villalpando et al. (this special feature) focus on grassroots innovation for the pluriverse in autonomous Zapatista education because this alternative to formal education plays a vital role in knowledge generation and the production of new social practices. They found innovative educational, pedagogical, and teaching–learning practices based on the (re)production of knowledge and learning, which are not limited to the classroom but linked to all the activities of Zapatistas like plant cultivation, cooking, and rituals that sustain territorial autonomy. Their findings suggest that innovation realized by the own Zapatistas plays a key role in the everyday construction of Zapatism. Therefore, grassroots innovation for the pluriverse can be distinguished by actively seeking the rupture with the roots of Western development. Each of these case studies contribute to a situated understanding of how alternatives to sustainable development are imagined, designed, and built by grassroots groups.

Concluding remarks

This special feature presents 12 case studies of the pluriverse in practice, with a focus on strategies for transformation toward equity, well-being, and ecological sustainability. These are empirically grounded contributions rather than discourse analyses and theoretical elaborations alone, because our goal has been to move beyond critique and resistance to understand how alternative practices can concretely flourish. In doing so, the protagonists of these communities, networks, and territorial initiatives have had to navigate complex decision-making around states, surpluses, and science in creative ways to avoid reproducing some of the key institutions of capitalist modernity.

One pragmatic aim of this multidisciplinary special feature has been to offer food for thought and action against the return to a post-COVID-19 normality of one-world sustainable development resulting in "self-devouring growth" (Livingston 2019). We thereby hope to continue encouraging careful dialogue between collective experiments in alternatives to capitalist modernity in an effort to build on the existing arts of living together sustainably (Tsing et al. 2017). This, we hope, might help move the damaged earth closer to sustaining flourishing lives for all with respect for planetary boundaries.

We do not propose that community, territorial, and network alternatives alone will save the world, but they are important experiments that merit more careful attention and from which lessons might be shared. By creating room under the conceptual umbrella of the pluriverse to discuss ongoing alternatives to sustainable development, we hope that researchers are moved—emotionally, intellectually, politically—to reimagine anti-capitalist pasts, presents, and futures in the worlds they enact. We have learned immensely from the special feature authors who turned stories about roots into routes for others to potentially traverse. In addition to the protest actions of anti-racist, environmental justice, and post-growth movements resisting the expansion of the one-world market, we hope these grounded experiments nurture the possibility of repair through collective action for those who are trying to stay alive in this period of rupture.

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