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1 Just global socioecological transformations

It takes a worldview change to change the world?

Sabaheta Ramcilovic-Suominen

Introduction and aims of the book: on transformations, structures, and ontologies

In sustainability policy and science, transformations—sometimes also called transitions—are often framed as ahistorical and apolitical (Chappin & Ligtvoet 2014; Hölscher et al. 2018). This literature emphasizes the importance of techno-scientific, institutional, and policy interventions to tackle socioecological, biospheric, and civilizational threats (Geels 2020; Kivimaa & Mickwitz 2011). While an important and diverse field, it often overlooks (neo)colonial-racial-capitalist structures and discourses as causes of the interrelated existential and socioecological threats (Danewid 2023; Ghosh 2021; Ramcilovic-Suominen 2025). Apart from ignoring the colonial-racial-capitalist origins of this socioecological destruction, the associated systemic violence and injustices generated and perpetuated by the colonial-racial-capitalist structures are also ignored, including poverty and social inequalities, climate colonialities, marginalization, and racialization (Fraser 2022; Hickel et al. 2021; Sultana 2024).

Incomplete assumptions about the root causes of socioecological destruction naturally lead to limited responses and viable solutions. The sociotechnical fixes and market-based instruments, such as carbon and biodiversity credits and off-setting schemes, have been slow and with limited benefits, if any (Nightingale et al. 2020). Despite the good intentions of some actors and some organizations, these interventions have often led to more problems than solutions (Fletcher 2023; Hickel & Kallis 2020; Nightingale et al. 2020) and have watered down or coopted the term transformations (Ajl 2022; Eversberg et al. 2023; Verhaeghe & Ramcilovic-Suominen 2024).

In response to this trend, a significant body of research on transformation has emphasized the structural or systemic causes of socioecological collapse, including the capitalist system and the colonial-racial-capitalist nexus (Brand & Wissen 2018; Feola et al. 2021; Ramcilovic-Suominen 2025). This literature highlights the related socioecological violence and injustices, and calls for just, postgrowth, de/anti-colonial, and capitalist transformations (Buch-Hansen et al. 2024; Gram-Hanssen 2022; Kothari et al. 2019; Ramcilovic-Suominen 2023; Martin et al. 2020; Temper et al. 2018; Whyte 2016). Often referred to as “radical

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transformations”—as the focus is on root causes and the Latin word “radicalis” means root—this literature primarily focuses on the structures/structural and/or system/systemic issues as root causes of socioecological violence and destruction. It usefully and rightly points out the vested interests and the colonial-racial-capitalist structures that devour human and more-than-human capacities, labor, creativity, reproduction, and bodies, as essential topics in transformations literature and praxis.

While various scholars acknowledge the importance of ontological issues (Dunlap 2023; Temper 2019) and call for epistemic justice (Rodríguez & Inturias 2018), the overemphasis on structures/structural violence often precludes any meaningful and deeper engagement with the ontological and epistemic assumptions that legitimize and discursively enable structural violence. Some scholars go so far to suggest that focusing on onto-epistemic issues, together with politics and the decoloniality of knowledge and worldmaking, is an unhelpful distraction from the “most urgent question of our time” (i.e., climate change and fossil capitalism) (Bluwstein 2021, see also Smith & Lester 2023). Such positions deny entire fields of political ontology and worldmaking (de la Cadena & Blaser 2018; Escobar 2020), eco-feminism and post-humanism (Barad 2007; Haraway 2016), and quantum social theory (Barad 2007; O’Brien 2021; Wendt 2015). All these fields postulate on the co-evolving nature of reality, which includes the entanglements between ideas and meaning on the one hand and outcomes/reality on the other. In transformations literature, worldviews and ontology are at most discussed in relation to social movements and resistance as an additional factor motivating the movements and resistance (Rodríguez et al. 2023).

Overlooking the ideational and ontological roots of the structures and systems of oppression leads to a narrow solutions space, with social movements, mobilization, insurgency, and activism, as the main or even only tenants of transformations (De Rosa 2022; Sovacool & Dunlap 2022). While an important contribution to the transformations debate, this literature does not acknowledge or seek to address the underlying foundations of structural socioecological violence, including worldviews, mindsets, logics, values, patterns, and paradigms that justify, and enable the colonial-racial-capitalist system and its violence. Worldviews and values are crucial as they guide and inform behavior and action (Hedlund-de Witt et al. 2014; Pascual et al. 2023), and thus, the institutions and structures of the colonial-racial-capitalist system of oppression, as discussed in the next section. Hence, acknowledging and understanding worldviews and values are crucial for an informed and holistic theory of socioecological transformations.

This book responds to the two above-outlined trends in transformations: (i) apolitical and ahistorical framing of transformations, which waters down the concept with intended or unintended benefit for the status quo, and (ii) the tendency to overemphasize the structural causes of socioecological violence and destruction. First, the book aims to reclaim socioecological transformations as by definition radical, justice-centered theory-praxis, which acknowledges and addresses the deeper roots of the current socioecological violence, related to the materialist-dualist worldview, as the basis and enabling factor for the colonial-racial-capitalist systemic (Escobar 2020; Fanon 1952; Mignolo 2011; Ndlovu-Gatsheni 2021; Said

1978, 1993; Quijano 2007). It broadens the meaning of transformations to include the ontological bases of structural causes of socioecological destruction. Second and related, it broadens the spectrum of means and responses for transformations, which are currently limited to social movements, disobedience, and insurgency, to include those that (i) challenge and seek to unlearn and undo the dualist-materialist worldview that underpins the colonial-racial-capitalist structures of oppression and (ii) that do so through various means, including contemplation, self-study, the practice of deep interconnectedness, inner transformations, radical kindness, and openness (Loy 2019a, 2019b; Macy 2021; Spira 2017). As is argued in the next few chapters, at a time when violence is dominant, such acts and responses are indeed truly radical.

While I highlight that contemplative work and contemplation about the “Self”, existence and relations, both individually and collectively as a society (please note that the “Self” here does not refer to the individual self but a larger relational and/or nondual Self, see Chapter 2), I do not reject the relevance of resistance, disobedience, and social movements. Their importance is reflected in various chapters in this book (e.g., see Chapter 7 by Minoia and Taher and Chapter 12 by Sekulova and Iserholn). Thus, rather than narrowing and limiting the scope and solution spaces, the book aims to expand them, for different personalities, societies, and contexts resonate and are aligned with different strategies and responses to violence and pathways to transformation(s).

Having introduced the aims of the book, the chapter continues by outlining the ontological aspects of the colonial-racial-capitalist structures, followed by a discussion on different worldviews and ontologies. It then introduces the book chapters and outlines the key concepts as well as conceptual omissions. Finally, it presents the methodological approach, followed by editor’s positionality that explains not only my positionality in relation to this but also my other contributing chapters (Chapters 2, 13, and 15).

On colonial origins of capitalism and the role of ontologies and worldviews: linking ontological (worldviews, ideas, meanings) and material (reality, outcomes, structures)

As I write in detail in *Capitalism as Colonialism as Capitalism* (Rameilovic-Suominen 2025), capitalism emerged and evolved alongside the European colonial project and the coloniality that followed thereafter and that continues to the present day. While the key purpose of capitalism is capital and profit accumulation at the sacrifice of human and more-than-human bodies, labor, territory, and dignity—such sacrifices, and by extension the accumulation of capital, and profit—could only be made possible through dehumanizing and racist ideologies. Such ideologies were essential for defending slavery and cultural assimilation of indigenous peoples across the colonized lands of the present-day Africa, Americas, Asia, and Oceania. The systematic denial of humanity and dignity to some humans, portraying humans of other races and origins, as well as more-than-human beings, as resources to be exploited and dominated by the white race, was justifiable

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under the dualist-materialist worldview, characterized by separation, divisions, and hierarchies of worth. However, I do not insist that idealist, relational, or nondual worldviews could never be misused to justify violence and domination. Rather, considering the premises of duality and separateness, I argue that it is substantially easier to use and misuse materialist-dualist worldviews to justify such violence, compared to worldviews that teach unity, coexistence, inherent oneness, connectivity, interdependence, and cooperation.

Before proceeding, please note that we deliberately use “indigenous” with a lowercase “i” rather than “Indigenous” with an uppercase “I” to reflect the nuanced and diverse perspectives of identities and lived experiences in local contexts, rather than adhering to a globalized or standardized idea of an “Indigenous” identity. By using “indigenous”, we want to signal the need to move away from the institutionalized and universalized “Indigenous” identity toward decolonized and self-determined approaches to identities.

As Fanon (1961, 1965), Du Bois (2010), and more contemporary scholars, such as Danewid (2023), make it clear, the colonial-racial-capitalist accumulation and dispossession required racial domination and slavery to ensure the manpower for resource extraction and exploitation of confiscated land in the “New World”. Racism became second nature for colonialism-capitalism; hence, “colonialism-racism-capitalism” form a tightly interlinked nexus of oppression and violence. The rise of early capitalist enterprises in the spice trade (Ghosh 2021) and monoculture economy (Zimmerer et al. 2023) that emerged in the European colonial era further clarify the union of racism, colonialism, and capitalism.

To enable human exploitation in favor of the colonial project and capital accumulation, black and indigenous people had to be stripped of their humanity. The enslavement, slave trade, and other large-scale violence by the European colonial power against black and indigenous peoples across the colonized territories of Americas, Africa, Oceania, and Asia could only be justified by portraying the white European race as civilized and superior to “black, red, yellow” human races, that were framed as wild and part of nature. Nature, in its own right, was framed as mechanistic and something to be controlled and beaten into submission (Mignolo 2011; Quijano 2000). The use and misuse of the Cartesian dualist worldview by the clergy, state bureaucrats, and scientists played a major role in advancing such ideas, harmful myths, and beliefs in the interest of the European colonial project (Mignolo 2011; Quijano 2000; Wa Thiong’o 1998). The colonial scientists of the time played a major role in providing the “evidence” that the colonized peoples of other than white races were less than human, closer to human primates than to the white European “superior” race (Baron Cuvier 1831; Blumenbach et al. 1865; Morton & Combe 1839). Quite in the same way, Christianity also played a major role in colonial advancement and the origins of ecological crises (Wilkerson 2020; White 1967).

Fast forward to present times, while the forms in which colonialism-racism-capitalism is practiced have changed, including the ownership of capital and to an extent its “color line” (Du Bois 1925), the underlying logics of the colonial-racial-capitalist regime are largely in place, with disproportionate

exploitation, extractivism, and, the sacrifice of racialized and gendered others and their land (Fraser 2022; Hickel 2017; Hickel et al. 2021; Patel & Moore 2017; Danewid 2023). This shows that the ideational and ontological bases of the colonial-racial-capitalist regime are at the core of the socioecological violence and destruction and should also be at the core of socioecological transformations theories and praxis.

While the colonial claims about biological differences between human races have dropped out in the post-colonial era, we can still see some of the same colonial narratives reemerging in the context of the Israeli genocide in Gaza. For example, the Israeli prime minister referred to the Palestinians as the “children of darkness”, which evokes the narrative of European colonizers. Considering the role that ideas, meanings, and knowledge have played and still play in enabling the systemic violence of colonial-racial-capitalist projects, not only are the linkages between colonialism, racism, and capitalism undeniable, but so are also, and by that very example, the linkages between the ideational/ontological and material/structural.

What currently drives the great divide between Minority and Majority Worlds (more commonly referred to as the Global North and Global South) is the Minority World’s interest in political and economic domination over the Majority Worlds (Rodney 2018). It is also amply evident that this is enabled by the international financial and trade structures and systems in place, such as the World Trade Organization (WTO) and the International Monetary Fund (IMF), which prevent the countries of the Majority World from accessing fair tariffs and subsidies, while keeping the wages low (Hickel 2017; Patel & Moore 2017). This drives not only extractivism in the Majority Worlds but also slavery within various value chains including most recently in the mining sector for the Majority World’s green transition (Almeida et al. 2023).

What is less discussed, yet plainly obvious, is that as in the past, such discriminatory global financial institutions are still manufactured, maintained, justified, and enabled by the same set of ideologies and mindsets that are deeply engraved in the dualist worldview of separation, competition, and domination. The issue is debated in the field of “coloniality of mind and knowledge” (Fanon 1952, 1961; Mignolo 2011; Ndlovu-Gatsheni 2021; Wa Thiong’o 1998), but this discussion is often limited to epistemic violence and the psychological impacts of colonization, and only to a lesser extent focuses on the material violence that this epistemic or cognitive violence reproduces, including land and labor appropriation and dispossession, modern slavery, and even genocide. Similarly, the need to decolonize minds is often sidelined as less relevant, as was touched upon in the previous section (Bluwstein 2021; Smith & Lester 2023).

The hard task at hand is abolishing the predatory global financial, economic, and trade structures. While such task requires multiple strategies, responses, and actions, it also requires challenging, unlearning, and undoing the ontological bases that directly maintain the current racial, (neo)colonial, and class-informed neoliberal capitalist grip of some states, regions, and some communities over others. It does so by providing the ideational, symbolic, normative, and ethical prescriptions

and paradigms, which become socialized and institutionalized and thus embodied and manifested in the society. This ontological foundation perpetuates divisive and competing institutions and societies, riddled by greed, competition, and conflicts, which is shown by the never-ending wars and divisions in the contemporary modern world. For anyone to live a life of justice, dignity, and abundance (Collard et al. 2015), all beings must live such a life. However, setting such goals requires an ontological shift from me to “mwe” (Siegel 2022). Adopting and embodying such a shift in and of itself make the (neo)colonialist-racial-capitalist system of violence and domination redundant, counterintuitive, and counterproductive.

On transformations, mind, and matter

The materialist-dualist worldview and its implications for transformations

Just socioecological transformations must challenge and address *that* which informs, shapes, and enables unwise, (Self)destructive, and predatory policies, institutions, technologies, and actions. We argue that the materialist-dualist ontological position outlined next is at the core of such unwise and pervasive destruction. At the risk of oversimplifying things, I will present the “materialist” and the “dualist” ontological positions together, using the term “materialist-dualist” position.

The materialist position portrays the nature of reality as consisting of unintelligent matter, which arguably produces intelligent life capable of (self)cognition and self-awareness; however, science is yet to explain how (i.e., “the hard problem of consciousness”, see Kastrup 2021; Kennedy & Norman 2005). This understanding is a backbone of the dominant metaphysics and the dominant materialist worldview that postulates that the universe and nature are unintelligent, mechanistic, and void of consciousness, into which conscious humans are born and then leave upon their death, as mere observers of the material reality and the world “out there”. The dualist position, which separates human from non-human or nature (see Chapter 3 by Gram-Hanssen and Chapter 4 by Ehrnström-Fuentes), is embedded within this generic materialist position (Kastrup 2014, 2021). This larger materialist-dualist position separates mind from matter and suggests that matter is an “ontological primitive” (meaning irreducible objective entity that does not need to be described in terms of and/or in relation to other “things” or “entities”). From there, it separates body from mind, object from subject, and observer from observed.

This way of knowing the world, especially in the context of techno-scientific progress and knowledge production, involves creation of multiple concepts and categories, through which we can know, observe, and give meaning to or measure events, entities, and phenomena, as they unfold in time-space and thus form and inform our idea of the world. This ontological position has led to significant advancements in science and technology, as well as the development of analytical lenses and theories for understanding and explaining the nature of reality, including our own “nature” and our roles and relations in/with the world. For instance, differentiating between different entities and categories (e.g., rock, chair, human, animals, or plants) has benefited our species evolution, as it serves

as a tool for protecting oneself, including one's bodily, physical, and mental autonomy and health.

Yet, it has also resulted in binaries and hierarchies (i.e., human/non-human, man/women, black/white, etc.), which have been and still are used to conduct and justify grave injustices, including ecocide, genocide, colonialism, racism, patriarchy, speciesism, sexism, extractivism, and other "isms". In other words, the resulting concepts, and hierarchies between them, with the original purpose of knowing/analyzing the interrelated entities as part-wholes of the whole, have been taken to represent separate objects and subjects that exist in absolute terms as actual objective reality. Such a reality is taken as given from materialist-dualist ontological standpoint, existing "out there" separate from the rest, that is, from the observer and the process of observation. In other words, in the materialist-dualist position, the separate entities (as well as their hierarchies) have been naturalized and taken to present events and phenomena that exist supposedly independently *in* the world (Kastrup 2014; West et al. 2020). This includes the institutionalization and socialization of the aforementioned "isms".

Relational and nondual ontologies and the political ontology

The above-outlined materialist-dualist ontological position stands in direct contradiction with a set of ontologies emerging from the ancient Eastern, Southern, as well as Western, and indigenous sciences, cosmologies, and philosophies of life, as emphasized by philosophers and thinkers, such as Lao Tzu, Alan Watts, Karl Jung, Artur Schopenhauer, and Plotinus, and indigenous thinkers, such as Ailton Krenak (Krenak 2023). The same is also increasingly challenged and debunked by modern science, including thinkers and scholars such as Rupert Spira, Bernardo Kastrup, Karen Barad, Bernard Carr, Dean Radin, and Federico Faggin, and undoubtedly many others who propose a variety of non-dualist or monist, relational, and idealist positions, several of which are discussed in the chapters that follow.

By placing them together, I do not intend to situate these multiple ontologies and philosophies on the same footing, as they differ in the ways and logics by which they frame their arguments, as well as in their actual arguments, and the scales at which they are discussed and applied. For instance, some interrogate the nature of reality at the metaphysical and ontological levels, while others debate the philosophical and/or ethical aspects. Hence, mindful of this diversity, I only focus on the one feature that is common to all of them, which is a rejection of the materialist-dualist position outlined above and the proposition of the innate oneness and/or intrinsic entanglement of all. Some describe it through the idea of one universal or cosmic mind, intelligence, or consciousness that all living beings are part-wholes of. As psychologist Siegel (2022) indicates, it is misleading to talk about interconnectedness but rather *intraconnectedness*, meaning that all beings are manifestations and representations of one extended "Self", with a capital letter S (see Chapter 2). This oneness rejects the separation between subject and object,

the observer and the observed, mind and body, or mind and matter. They propose that the different entities and categories that we observe as separate are manifestations of the “Self”, that is, “part-wholes” of the Self, in much the same way as the roots, trunk, and branches are part-wholes of the same tree, and as waves, clouds, and rivers are all different manifestations of water. Even if there are significant differences in the way this oneness and intraconnectedness are interpreted in different traditions, they all challenge the absolute existence of a self that is separate from the rest (the “I/me” or “ego self”). Invariably, they teach unity and non-duality (Loy 2019a, 2019b; Spira 2017; Watts 1960), deep relationality (Valkonen et al. 2022; Viveiros de Castro 2014; Topa & Narvaez 2022), and intraconnectedness (Siegel 2022) as a way to shift from an I/we notion of the self to an expanded, intraconnected, relational Self.

While we can generally state that *ontology* is about the ways in which we understand the nature of reality and the world, dealing with the questions of (co)existence, matter, structure, material, mind, relations, and eventually the meaning of life, ontology is approached in many different ways in an ever-growing span of disciplines, depending on the historic and geographic contexts in which these disciplines are embedded and from which they emerge. I emphasize that ontologies and worldviews are not one and the same; namely, a worldview can be understood as a set of cultural and psychological frameworks through which people interpret and understand the world, including beliefs, values, and assumptions. Ontologies are deeper and more foundational than worldviews, pertaining to fundamental questions of existence, being, and reality (Leichenko & O’Brien 2024). Rethinking both is required for changes and transformations of the kind and scale we discuss in this book. For my generic and hopefully easily accessible way of presenting the issues at hand, I sometimes use the two interchangeably.

Continuing the discussion on the materialist-dualist position (Section 2.1), I will start with the Western school of thought, as I wish to emphasize their similarities and overlaps with the ancient Eastern, Southern, and indigenous cosmologies and sciences, which in the past have been largely omitted and unacknowledged. In Western philosophy and schools of thought, ontology predominantly deals with the mind-matter problem, that is, what is the relation between them? Are they distinct “entities”, or is rather one a representation of the other, which leads to the key question of ontological primitive or primer, defined above.

On the one extreme of the ontological spectrum lies the *materialist* position (Section 2.1), which suggests that everything originates from matter, and that mind and by extension consciousness is “made in” the brain, running into the unresolved “hard problem” of consciousness, which remains unabated (Kennedy & Norman 2005). As discussed earlier, the materialist position gives rise and legitimation to other related binaries, including mind-body, human-nature, subject-object, and nature-culture, which are then tackled to various degrees in various strands and schools of thought. This dominant Western ontological position is in direct contradiction with the ancient, native philosophies from the Eastern, Western, Southern, and/or indigenous philosophies and sciences.

At the opposite end of the ontological spectrum, I place the *analytical idealism* (Kastrup 2014, 2021), which explains the nature of reality in direct contrast to the materialist-dualist position. It resonates with a wide variety of non-dualist, non-materialist ontologies and worldviews. It proposes that universal consciousness (often referred as the mind at large) is the ontological primitive, and everything else unfolds within it and can only be known through the experience of it (Carr 2003; Faggin 2019; Kastrup 2021). In other words, all exists in the consciousness, the one cosmic mind. Analytical idealism resonates with Eastern spiritual traditions and philosophies of non-duality (Loy 2019a, 2019b; Spira 2017, see also Chapter 2), as well as with posthumanist (Barad 2007, Chapter 3) and indigenous cosmologies (Krenak 2023, Gebara, Chapter 5). At its core, it is a monist (here used as a generic term and as opposed to dualist) tradition, even if it differs from some monist positions that Kastrup (2021) considers as “dualist-monist”.

Finally, the analytical idealism resonates with relational ontological approaches (West et al. 2020, 2024, see Chapter 4 by Ehrnström-Fuentes)—which I place in the middle of metaphorical ontological spectrum—as it emphasizes the inter-/intraconnectivity and relationality. It is worth highlighting that there are differences in the ways relations are understood and framed in relational approaches vis-à-vis analytical idealism, as some relational approaches tend to frame relations in classical terms (i.e., as relations between distinct entities that interact locally to form wholes), while others use relations in quantum terms (i.e., through nonlocality and entanglements) (Barad 2007; O’Brien 2021; Wendt 2015; West et al. 2024). These approaches have profound implications for questions related to human-nature relations, justice, sustainability, and transformations (West et al. 2020, 2024).

Relational ontological approaches, which emerge predominantly from Southern, Eastern, indigenous, ontologies and philosophies, have relatively recently appeared in sustainability sciences and transformations literature (Walsh et al. 2021; West et al. 2020, 2024). In this literature, the ontological questions remain focused on the relations between humans and nature, and/or nature and culture, while the broader ontological questions of existence, nature of reality, and mind and matter are explored to a lesser extent—with some notable exceptions (Barad 2007). Recognizing the vast array of approaches, disciplines, and the substantial differences among them (for an overview, see West et al. 2024), they share the non-dualist position, which in this context is expressed with the view that “humans are nature and nature is humans”.

Relational ontological approaches are a common theme in post-humanist, neo-materialist, and eco-feminist literature (Barad 2007; Bennett 2010; Haraway 2016). To various degrees, they emphasize the inextricable relations between human and nature, and the embodied and performative agency, the *intraconnections* and *intraactions* (Barad 2007; Siegel 2022) of the part-wholes, as opposed to *interactions* and *interactions* between separate parts of a system. The use of “intra-” implies that everything is entangled and comes into being, or is co-constituted, through relationships, as opposed to “inter” where separate pre-existing entities or agencies act upon one another. In Barad’s words, “*the ‘distinct’ agencies are only distinct in relational and not in absolute sense*” (Barad 2007:33). This includes

intra-actions between meaning/mind, matter/structures, human/non-human, organic/non-organic, and various other concepts, categories, and entities that are set apart in the classical, materialist-dualist ontology. This approach emphasizes the potentiality to world (used as a verb) different realities or “worlds” (Barad 2007; Bennett 2010; Blaser 2014). These concepts and categories are not seen as purely constructed or “mental” (i.e., they are not cognitive phenomena disconnected from the world). Rather, they are embodied and performative, able to actively participate in making of reality (Barad 2007; Campbell 2020). Emphasizing the emerging and (co)becoming nature of reality (Barad 2007; Blaser 2014), they have also been referred as “process-oriented” ontologies (O’Brien 2021; West, et al. 2020).

Finally, a closely related concept that is prominently featured in this book is *political ontology* (Blaser 2014; de la Cadena & Blaser 2018). It has its origins in multiple geographic, historic, and disciplinary contexts, including the Western or Euro-Atlantic science-technology studies (STS) (Latour 2004; Law 2015), and in the field of anthropology and the contexts of extractivism and indigenous justice in South America (de la Cadena & Blaser 2018; Escobar 2018, 2020). While both branches have informed our thinking and writing, the latter branch is more prominently featured in this book, primarily due to its strong focus on the relations between human and nature, and/or nature and culture. Central to this branch or perspective of political ontology is the critique of modernity/coloniality and viewing ontology as a world-making practice (see Chapter 4 by Ehrnström-Fuentes). Its particular focus is the critique of the human-nature divide within the Eurocentric modernity/coloniality. In this book, Ehrnström-Fuentes (Chapter 4) draws exclusively from political ontology as it emerges from the indigenous context in Latin America, while Gram-Hanssen (Chapter 3) reviews and builds upon a variety of relational ontologies.

Contributions to socioecological transformations praxis-theory: overview of the book chapters

While presenting the contributions in relation to the wider literature, for analytical purpose I frequently use dualist thinking, differentiating between the ontological versus structural, and the mind/mental/ideational versus physical/material. Nonetheless, as it will become clear from this overview, most of the chapters go beyond these binaries, highlighting their entanglements and how they reproduce and materialize one another.

Ontological transformations

Chapters 2–5 emphasize the less acknowledged yet central aspects of socioecological destruction and transformations (i.e., the roles ontologies and worldviews play in just socioecological transformations). They offer an onto-epistemic inquiry of (co)existence and ways of (co)becoming in the world (ontology), as well as ways of knowing (epistemology), and how certain practices and experiences lead to ontological transformations (e.g., working with the land in

multi-species entangled worlds, or using of medicinal plants in line with ancestral knowledge).

Ramcilovic-Suominen (Chapter 2) continues to position the book within the existing literature on transformations, while addressing the book's commitment to reclaim transformations as something that addresses the root causes of the socioecological crises. Inspired by Hindu and Buddhist teachings, the chapter emphasizes the illusion of a separate self as the root cause of human suffering (Loy 2019a, 2019b; Macy 2021), as well as the materialist-dualist metaphysics and worldview (Kastrup 2014) within which the illusion is based and reproduced. After deconstructing the absolute existence of a separate self, the chapter outlines the concept of "radical intraconnectedness", by engaging the idea of the expanded relational and/or nondual "Self", with a capital letters S, as to differentiate it from the separate self, or ego-self. After presenting the implications of these ideas for the ways we relate to, face, and deal with injustices, including socioecological destruction, war, and other forms of violence, the chapter connects the collective and structural with the individual and personal realms by outlining a fractal approach to transformations (O'Brien et al. 2023).

Gram-Hanssen (Chapter 3) discusses deep relationality as an ontology that positions relations and the process of relating as a "ontological prior" to entities. To put it simply, entities exist because there are relations and processes of relating, rather than the other way around. Gram-Hanssen lays the conceptual groundwork for understanding the major argument of this book, that is, the relational, non-dual and non-deterministic metaphysics as an alternative to materialist and realist metaphysics. In the chapter, she elaborates on the concepts of entanglement, performativity, world-making, (co)becoming, contextuality, and intra-acting, as key tenets of relational metaphysics. Drawing from indigenous and posthumanist scholarship, she discusses potentiality and responsibility (i.e., our potential to perform relations differently, and our responsibility to do so), as key tenants of deep relationality and transformations. She concludes with some of the implications of this way of thinking, not only in terms of socioecological transformations but also in terms of how we perceive our agency and how we engage, intra-act with change (O'Brien 2021).

Ehrnström-Fuentes (Chapter 4) examines the ontological transformations experienced by farmers involved in regenerative agriculture (RA). She discusses what those ontological transformations entail and how they reshape the web of life and make new worlds come into being. Situated in the theoretical field of political ontology and using a story telling method based on interviews with RA farmers from around the world, Ehrnström-Fuentes proposes that ontological transformations occur through working with the land in a regenerative manner and engaging with more-than-human agencies. The chapter brings to light the more-than-human agency in transformations, and how new realities are brought into being through "worlding" practices. This challenges the idea that change is forged through human practices and engagements with nature as an external object that is only transformed by human agency; instead, she demonstrates that change happens from within the more-than-human relations.

Gebara (Chapter 5) continues to expand the ontological aspects of transformations by focusing on the ancestral and indigenous knowledge and rituals that can strengthen the sense of unity and deep relationality with the rest, by boosting the experiences of self-transcendence. Framing the socioecological crises as spiritual crisis, Gebara analyses the role and potential of indigenous spiritualities for individual and collective transformations, by awakening our senses of interconnectedness. As she puts it, “*Indigenous spiritualities awaken our relationship with something greater than the self*”. Like Gram-Hanssen (Chapter 3) who connects the indigenous cosmologies with the Western post-humanist perspective, Gebara uses concepts from Western science including “ecologies of mind” (Bateson 1972) and “ecological self” (Naess 1973), as a lens to her empirical case of Yawanawá spiritualities.

Transforming at the intersect between ontologies and structures

Following this onto-epistemic inquiry, the rest of the book presents attempted cases and examples of transformative change (Chapters 6–12), and cooptation of the discourse of transformations at policy levels (Chapters 13–14). The presentations of the chapters do not follow their numerical order in the book, but are presented in a way that connects specific aspects of various chapters, which allows for a more logical flow of the ideas.

Minoia and Taher (Chapter 7) present two experiences of educational resistance in conditions of colonial oppression in the Ecuadorian Amazon and Palestine. The Ecuadorian case concerns the oppression emerging from the poisoning of land and the relocation of indigenous peoples caused by capitalist extractivism, while the Palestinian case is a denial of territory itself and the fragmentation of existence through settler colonialism. Minoia and Taher beautifully and powerfully connect the notions about land, colonization, and education, by situating learning and deep relationality between communities of humans, earth beings, and spiritual realms (de la Cadena 2015). As they put it, “*Learning about land as an assemblage of beings, relationalities and meanings is rooted in historical, cultural and ecological interconnectedness*”. They emphasize the importance of participating in social change movements within educational spaces and show how the students in the two contexts have created spaces of care, land-based and liberating pedagogies for decolonizing and reclaiming land, education, and learning.

Sekulova and Iserlohn (Chapter 12) make a case for tourism degrowth in Barcelona. Using degrowth as systemic critique of growth dependency and the supremacy of economic patriarchal reasoning, emerging from the realities and experiences in the “Global North”, they present tourism degrowth as a concept and an act of reimagining the relation to the place. They situate mass tourism as an expression and manifestation of the capitalist imaginary, highlighting the associated exploitation and extractivisms, such as the processes of gentrification and expulsion of residents and local commerce, precarious work conditions, and ecological destruction. They discuss how the encounters of mass tourism in Barcelona have brought forth imaginaries that emphasize the emotional and

affective relation to the place, and how degrowth tourism can be seen as an act of envisioning a city that is not guided by economic growth at the cost of other socioecological values.

The book then moves on with examples and cases of transformative strategies that challenge hegemonic structures and discourses through embodying and manifesting the shared values and worldviews, which translate in engagements and agency to embody different realities.

Bhadgaonkar et al. (Chapter 9) show the potency of rooting transformations in local communities' agency, values, their local and indigenous knowledges to transform the crumbling infrastructure and dysfunctional waste management in places populated by Indigenous Kolis in Mumbai. They give a detailed account of coproduction process that involves forging new hybrid alliances for change, which fostered a bottom-up-driven and deliberative urban planning approach in Mumbai. The role of socially just planning practices that allowed a marginalized fishing communities to shape the city's future is presented as an example of bottom-up transformations. Transformations in this context is praxis and thus an emancipatory, and self-conscious collective action that is based on and nurtures values of justice, equity, empowerment, and agency.

Kothari (Chapter 8) contributes with the framework of Radical Ecological Democracy and the idea of a tapestry of alternatives. The chapter provides an overview of various civil society and communities' self-organization and self-rule initiatives for their political, cultural, and economic autonomy and liberation. It outlines the meaning and the common principles that underpin this tapestry and some of the challenges they face. Most of the challenges refer to the efforts to undermine the alternatives by external actors and dominant political and economic hegemony, including the political and bureaucratic leadership, and state/corporate actors who align with the green economy agenda. The aim of the chapter is to present an overview of alternatives, rather than detailed accounts of how they function and what challenges they face.

Kallio and Houtbeckers (Chapter 10) discuss how providing an alternative to destructive extractivist agricultural and farming practices requires recognition and awareness of the intimate entanglement between ecology, economy, society, culture, and politics, which are often mistakenly taken as separate spheres. Cultivating this alternative requires recognition and awareness about the more-than-human worldmaking, and co-becoming, from where our responsibility for a wellbeing of all emerges as an obvious and logical position that benefits all relations and all species, including humans. Such changes require a worldview shift, which in turn brings change to the existing practices, policies, and technologies. As Kallio and Houtbeckers show, without such an ontological shift, even when societies adopt the practices of agroecology and regenerative agriculture, as well as food sovereignty, and alternative and local food networks, they are mobilized and enacted in a way that serve green capitalist and techno-scientific agendas.

These findings resonate with **Jauhola et al. (Chapter 6)**, who draw similar conclusions from the spaces of transformative movements, including movements

for food sovereignty, and the World Social Forum. Drawing on Puig de la Bel-lacasa's (2012, 2017) three-fold approach to care (i.e., care as labor, affect, and politics/ethics), as well as care around relationality and interdependence, Jauhola et al. make a case for grounding efforts of transformations on this expanded idea of care. This requires framing of care as a constant self-reflection about the dynamics, power relations, narratives, discourses, mindsets, and hierarchies that co-shape our being, knowing, and acting. In other words, being aware of our situatedness and positionality of the ways in which we become in the world and our entanglements and intra-action within it. The implications of this care for socioecological transformations are thoroughly explored.

Finally, **Holmgren et al. (Chapter 11)** think with Plumwood's ideas of "shadow places" (Plumwood 2008) to experiment with the concept of "shadow forests" in Swedish context. They examine possibilities for a forestry model beyond the dominant Swedish model that erodes the ecosystems and the human and more-than-human communities. Empirically, they ground their case in stories where human and other-than-human's needs and desires are placed in relation and support of one another, rather than in competing terms. These stories reject the imposition of standard Swedish forest model and the notions of trade-offs and extractivist practices. They show the relevance of engaging with situated knowledges, senses, values, and practices—all of which are underplayed and deemed irrelevant by dominant industrial forestry culture—while highlighting the relevance of holding space for ecological processes and non-human lives, roles, and needs for transforming traditional forestry models toward models based on care and responsibility.

The final two chapters present cases of cooptation of transformations within policy circles and practice. Focusing on the European Union (EU) green transition and EU bioeconomy policy (**Ramcilovic-Suominen, Chapter 13**) and the EU's anti-deforestation policy in Honduras (**Verhaeghe, Chapter 14**), the chapters show how when the language of transformation penetrates the policymaking processes, it becomes a tool for advancing hegemonic and dominant policy and economic agendas. They find how by using various means and justifications, including limiting the discursive space as to what does/does not constitute transformations and what terms can/cannot be used (e.g., sufficiency and regrowth rather than de-growth), as well as by limiting institutional space and logistical options to include indigenous institutions and voices, the two EU policies foreclose rather than enable transformative action and change.

Some of the key concepts and some omissions

Following the post-humanist and eco-feminist positions that emphasize the entanglements between matter and meaning, material and ideational (Barad 2007), Gram-Hanssen (Chapter 3) draws from the quantum view of reality and the notion of quantum field (Barad 2007; O'Brien 2021) to introduce the idea of the wave function of potentiality collapsing in a certain outcome, at a time of the observation (Wendt 2015), to emphasize **deep relationality** and **potentiality**. Several other chapters also discuss and refer to the entanglement, even if from a different angle. For example, taking a Yogic perspective, Ramcilovic-Suominen (Chapter 2)

highlights the **radical intraconnectedness**, while Gebara (Chapter 5) draws on the experiences of embodying indigenous cosmologies and rituals, to emphasize the embodiment of “**ecological self**” (Naess 1973), and “**ecologies of mind**” (Bateson 1972). Further, Ehrnström-Fuentes (Chapter 4) uses a political ontology lens to elaborate on “**worlding**” (Blaser 2014) and **ontological shift**.

The concept of **care as politics and as ethics** (Puig de la Bellacasa 2017) is mobilized by Jauhola et al. (Chapter 6) to emphasize the deficit of care in transformative movements, while Holmgren et al. (Chapter 11) thinks with Plumwood’s “**shadow forest**” (Plumwood 2008) concept. The concept of **ecological livelihoods** (Gibson-Graham & Miller 2015) is elaborated by Kallio and Houtbeckers (Chapter 10) to point to three related categories of making (autopoiesis), receiving (allopoiesis), and providing (alterpoiesis) in support of making a living in regenerative farming. Some chapters are rooted in decolonization and resistance, engaging concepts of **epistemic (in)justice, epistemicide, scholasticide** (Chapter 7 by Minoia and Taher), and finally **degrowth** tourism (Chapter 12 by Sekulova and Iserholn).

These themes and topics resonate with the Pluriverse (Escobar 2018, 2020; Kothari et al. 2019), yet we do not engage with this framework directly, considering the depth and breadth of the existing literature on the Pluriverse. Similarly, concepts and perspectives that resonate with this book, but are less directly addressed, even if not fully omitted (see for instance, Chapter 10 by Kallio and Houtbeckers and Chapter 4 by Ehrnström-Fuentes) include the more-than-human lens and the multi-species justice perspectives (Celermajer et al. 2022; Price & Chao 2023). They are also reflected in and aligned with the animist and spiritual perspective and the idea of kinship emphasized in chapters by Gebara (Chapter 5) and by Gram-Hanssen (Chapter 3).

Some of the omissions, which were planned but were not realized, include the Saami ontologies and worldviews, struggles for land/territory, and their way of life (Valkonen et al. 2022; Kuokkanen 2020). This is a clear gap, especially considering that the editor and the many contributing authors are based in Finland and some in Sweden. This gap remains despite the editor’s attempts to include such contributions, contacting several Saami scholars and activists, as well as two non-Saami scholars working in this field. Lacking an adequate network, as well as the time constraints of the potential contributors were the key reasons for this omission. Similarly, and for similar reasons social movements and youth activist perspectives are also lacking, even if such contributions were also sought for inclusion and initially promised. Finally, a chapter on degrowth as a concept inspired by the philosophies and thinkers of the South and for the South was also promised and agreed upon but sadly remained unrealized in the end.

Methodology and positionalities

Notes of methodological choices and approaches

Methodologically, the book and the contributing authors aspire to decolonial, feminist, and in some cases, posthumanist research approaches and methodologies. Such research is embedded in and situated with(in) the land and those living

with(in) that land, both human and more-than-human beings and relations, and within their often-shared histories and needs, concerns, and fears. Rather than studying phenomena, entities, and human and more-than-human dimensions, the authors in their own positionality as external researchers contribute and actively participate in the relations, ideas, phenomena, and the meaning given to them. They thus become part of the study, influencing and being influenced by the research process, interactions, and relations, all of which shape the final arguments and interpretations.

These aspirations are shared among the authors and were discussed early in this collective writing project. Yet, as the following pages bear witness, there is a difference between the commitment and adherence to such methodological and reflective research approaches. Each of us has been challenged to do research and write differently than how we are taught in our academic training and practice. This way of working is already an established practice for some authors more than others, and thus for some it was easier to adhere to such research approaches than for others.

I place myself in this second category, especially when writing Chapter 13, where I take a conventional methodological approach, without self-reflecting on my worldviews and personal history, and how they shape the framing and the observations of the study. To address this gap, I outline my positionality in relation to this and my other contributing chapters in the next subsection. Other challenges that many of us have faced include research done at a time of the global COVID-19 pandemic, which limited collaborative engagements and partnerships with the local communities and holders of the local, embedded, practical, indigenous, and ancestral knowledges (e.g., Chapter 14 by Verhaeghe, Chapter 9 by Bhadgaonkar et al., and Chapter 4 by Ehrnström-Fuentes).

The authors of various chapters (11 in total) include collaboration with local communities, practitioners, and citizens experienced and to various degrees took part and influenced the studied transformations, using ethnography and participatory research, across different contexts, including (i) indigenous communities in Brazilian Amazon (Chapter 5 by Gebara), Alaska (Chapter 3 by Gram-Hanssen), Honduras (Chapter 14 by Verhaeghe); (ii) coastal indigenous communities in Delhi, India (Chapter 9 by Bhadgaonkar et al.); (iii) educators and students in Ecuador and Palestine (Chapter 7 by Minoia and Taher); (iv) regenerative farmers from the Minority and the Majority Worlds (Chapter 4 by Ehrnström-Fuentes); (v) policy-makers in the EU (Chapter 13 by Ramcilovic-Suominen); (vi) practitioners, farmers, forest dwellers in Northern Europe, including Finland (Chapter 10 by Kallio and Houtbeckers), and Sweden (Chapter 11 by Holmgren et al.); and finally (vii) citizens, civil society and activists in Spain (Chapter 12 by Sekulova and Iserholm).

The editor and for the most part the contributing authors are based at academic institutions in the Minority World, except for Ashish Kothari (Chapter 8), an activist and organizer based in India, Jai Bhadgaonkar and Ketaki Bhadgaonkar (Chapter 9), co-founders of Bombay61, and Cecilia Lundin (Chapter 11), a professional forester. Many of us based in Minority Worlds across the EU engage with decolonial practice and thinking, either in our role as teachers and researchers and/or in our capacities as citizen, participating in decolonial citizen initiatives and

movements. As researchers, many of us who work in specific historic and geographic settings have established long-term collaborations based on mutual trust and respect with research partners and participants, including local and indigenous communities, holders of local, practical, and tacit knowledges and those engaged in the various struggles for self-determination and justice (e.g., Chapter 7 by Minoia and Taher). Regardless of a reflexive and critical stance in our research and our aspiration for decolonial and non-extractive research methodologies, our specific and deeply engrained worldviews, and backgrounds, and our positionality as educated white European women (men are based in Majority worlds), bear an inevitable bias, and we acknowledge it throughout the book pages, including my own positionality presented next.

Editor's positionality in relation to this and other chapters

Born in the present-day North Macedonia (then Social Republic of Macedonia, part of Social Federal Republic of Yugoslavia) to an immigrant Bošnjak family from Sandžak region,¹ who are one of the several marginalized ethnic minority groups in former Yugoslavia (Ramčilović 2011). I grew up with a sense of systemic economic, political, cultural, and educational exclusion and discrimination, and with it a certain degree of humiliation related to *being* different and being *differently*, meaning living differently compared to the majority group of ethnic Macedonians. This instilled in me a strong repulsion against discrimination based on social and cultural segregations, such as religion, ethnicity, physical appearance, tone of skin color, social class, and level of education—and with that an uncompromised quest for social justice.

The very way of living associated with our exclusion—such as working with the land in subsistence agriculture and taking care of domestic animals that sustained us in the most direct way—has been essential in generating the sense of unity, dependence on, and coexisting with the rest of nature. This sense was also greatly supported and encouraged by my community's and family's religious view of unity with the divine, which for us meant the merciful Allah that is all around us.

Of course, such teachings can be interpreted in multiple ways, but the way I interpreted my grandmother's stories such as "we are from the earth and to earth we will return" is closely aligned with the non-dual philosophical views of which I came to learn decades later, and which now I finally dare to write about in my role as a scholar. Our exposure and dependence on natural phenomena, including floods and hail, which directly affected the crops we ate and our livelihoods more broadly, the use of wild plants for food and medicinal purposes, and the practice of various customs that defined the way in which we inter-/intra-acted with the land, plants, and other animals, who sustained us and whom we sustained in return, also strengthened the affinity to spiritual aspects and meanings of life. Hence, this background greatly explains my affinity for non-dual and relational ontologies and worldviews, as is evident in Chapters 1, 2, and 15.

My early childhood upbringing and my adolescent years stand in stark contrast with most of my adult life. Throughout my adolescent life, during high school and university in the capital of Skopje, I was conditioned to be in conflict with my own upbringing. So, perhaps unconsciously I sought further education and a life far from home. This led me to first live and work in Italy, then earn a Master of Science degree in Germany, followed by doctoral and postdoctoral studies in Finland. This education was possible thanks to the income I earned by working two years in Italy and later to Finnish and international stipends and research grants. Yet, my upbringing has shaped my education and career paths in major—even if hidden—ways, influencing not only what I studied and researched, but how and where I studied/researched. Internally driven and pre-dispositioned to pick on the uncomfortable questions in the predominantly white and positivist science academic and research institutions in Finland, I was drawn to political ecology and decolonial thinking. I was also drawn to the subject of European domination and colonialization, which defined the geographical scope of my internships and research in former European colonies, including India, Ghana, and Laos.

Despite the background of certain degrees of discrimination, I acknowledge the guilty privileges of my relatively white skin and what it symbolizes in the different geographies. When as a white European, based at Finnish research institutes, holding Finnish citizenship and a Finnish surname, I conducted research with policymakers in Brussels (Chapter 13), they did not question my right to do so, as they would have if I were of African descent. Hence, my white European identity prescribes me certain entitlements and rights of doing research in Europe.

In contrast, when I do research with rural communities in Ghana and Laos, my skin color understandably can cause unrest, envy, or suspicion, which in turn affects trust and interactions. While they have the right to question my research on their land and with their communities, this has rarely happened. When conditions are right, we discuss these issues and tensions. Acknowledging and discussing the unsaid helps build trust and connection. I often talk about the social and economic heterogeneity of Europe and about marginalization of Southeastern European countries by the European Union, and about my own childhood in similar rural settings and with livelihood options not too different from theirs. These exchanges bring a sense of amazement and sometimes relief, strengthening our connections and affecting further the realities that we co-construct together during these research visits.

Finally, and in relation to this chapter and Chapter 2, while the above-described cultural background provides a foundation for the feeling of connection and interdependence with all that is, my writing is also heavily influenced by the existing literature, as well as my decade-long practice of Yoga as a philosophy and science, including in the frame of the Yoga teacher's training that I completed several years ago. More recently, I have become interested in Buddhist teachings and practices, the practice of vipassana and mindfulness. All of this drives my curiosity and motivates me to learn more about myself and about the Self, discussed in the next chapter. I am increasingly convinced that this will shape my future research, as I become ever more motivated to connect the wisdom of those teachings and my social-environmental science training.

Note

1 <https://en.wikipedia.org/wiki/Sand%C5%BEak>

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