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SPECIAL FEATURE: ORIGINAL ARTICLE

Promises of Bioeconomic Change as a Strategy for Avoiding Socio-ecological Transformation

From hegemony-reinforcing to hegemony-transcending transformations: horizons of possibility and strategies of escape

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Abstract
In the face of ever escalating global socioecological crises, the necessity of radical systemic transformations has gained increasing political and academic traction over the last decade, among others in the context of 'green' and bio-based economies. We draw on the works of political philosophers Ernesto Laclau, Chantal Mouffe and Judith Butler to develop a typology of transformational dynamics. In this typology, the word transformation implies political agendas, processes and outcomes that involve the total structural reordering of a social field, which we juxtapose with 'inclusion', which implies cases in which pre-existing logics are further entrenched or extended. Drawing on the theoretical framework of hegemony, inclusions and transformations, we develop an analytical lens that focuses on the relations between hegemony and transformative dynamics. This analytical lens is developed and exemplified by discussing the transformative potentials of multiple socioecological and political agendas, including those associated with eco-modernism, Marxism, decoloniality, eco-feminism, degrowth and eco-anarchism. Depending on the transformative dynamics in relation to hegemony and the dominant political logics, we distinguish between hegemony-reinforcing, hegemony-replacing, and hegemony-transcending transformations. The provided lens and the typologies of transformations should be useful to those seeking to conceptualize, differentiate, analyse, and tactically strategize the realization of an array of socio-ecological agendas.

Keywords Transformations · Hegemony · Decoloniality · Policy analysis

Introduction: unpacking transformations

Everyone seems to be calling for transformations these days, from grassroots activists to global policy forums. Yet, there remains little consensus on what transformations actually mean, to whom, what it should or should not involve, how it should be achieved, and by whom (Bentz et al. 2022; Feola 2015; Scoones et al. 2020; Bluwstein 2021). The term rose to prominence in socioecological discourses as a direct response to the growing evidence for the failure of the mainstream, reformist, reactive and status quo favouring strategies and policies to address the multiple escalating crises facing the planet (Steffen et al. 2007; Gills and Morgan 2020; IPCC 2021). Within the literature on transformations, there is a general agreement that to tackle the multiple socioecological challenges and remain within the Earth's planetary boundaries, transformations must go beyond such mainstream approaches, and involve profound, society-wide shifts (Hölscher et al. 2018; Feola 2015; Scoones et al. 2020). However, this generic agreement concerns only a broad acknowledgement of the importance of ecological or planetary boundaries. Whilst many approaches are primarily concerned with such physical and material concerns, others emphasize the critical importance of so called 'immaterial' issues, including onto-epistemological aspects and relationality, as precondition for transformations (Gram-Hanssen et al. 2021, Gills and Hosseini 2022; Whyte 2020). As one of the authors argues elsewhere, to avoid reproduction of the structures of domination and neocolonialism in the policies such as bioeconomy, there is a need to address the historical and current socioecological and economic inequalities and

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the associated responsibilities, the asymmetric power relations, the oppression and the various forms of domination (Ramcilovic-Suominen et al. 2022).

Despite or perhaps because of an active scholarly and political debate on transformations, the meaning of the term remains ambiguous. This is, however, unsurprising given that there are and there should be many and conflicting visions of what the future of the world should be. We cannot expect any term to provide us with a simple escape from the fundamental disagreements and antagonisms that are the substance of politics. Nonetheless, the openness of the term has left the term susceptible to co-option (Bluwstein 2021; Blythe et al. 2018). Indeed, it has increasingly been deployed as yet another buzzword associated with mainstream, socio-technical and market-based solutions that appear to do little to seriously challenge the status quo, as evident in the policy domain dealt with in this Special Issue - the bioeconomy policy (Holmgren, et al. 2022; Leiplod 2021; Ramcilovic-Suominen et al. 2022). Concurrent efforts to develop more specific, radical conceptions of transformations have in part been aimed at insulating the term from such threats of co-option, calling for among others radical (Pugh 2009; Temper et al. 2018), decolonial (Temper et al. 2018; Gram-Hansen et al. 2021), deep (O'Brien 2020) and just (Bennett et al. 2019) transformations. Whilst these conceptualizations are also contested, they typically seek explicitly to identify and address systemic root causes of injustices and vulnerabilities (Martin et al. 2020; Ramcilovic-Suominen 2022). Such approaches actively engage questions of power, politics, social production of knowledge, collective actions, the role of social movements and grassroots when articulating the what and sometimes the how of transformations (see, for example, Pelenc et al. 2019; Rajan et al. 2022; Visseren-Hamakers et al. 2021; Vogel and O'Brien 2022).

The literature on transformations and the reviews of this literature are growing steadily over the past decade, as it can be deduced from the above. Reviews of transformation literature have identified, among others, the following approaches to transformations: technology-led; market-led, state-led, and citizen-led transformations (Scoones 2016); as well as structural, systemic and enabling approaches to transformations (Scoones et al. 2020). Some scholars have approached transformations through so-called leverage points, mainly but not only to provide research agenda for sustianability transformations (Leventon et al. 2021; Gaziulusoy et al. 2021). Others have employed notions of justice as central to transformations, introducing 'just transformations' (e.g. Bennett et al. 2019) and applying it to a range of sectors, such as food or climate, calling, for example, for transformative climate justice (Newell et al. 2021). With few exceptions (e.g. Blythe et al. 2018), the bulk of this literature approach transformations as necessarily positive, and focuses on the aims and objectives, while insights on the process and the how of transformations continue to lack (Bentz et al. 2022). In this paper, we aim to respond to the lack of critical insights and to shed light on the how of transformations, by focusing on the process, not only the outcome of transformations.

Drawing on the work of political theorists Ernesto Laclau, Chantal Mouffe and Judith Butler, this article theorizes the concept of transformations, by contrasting it with that of inclusions, using Laclau's term 'political logic'. Political logic is understood as a general type of change mechanism within the social sphere that operates at two levels—as a process by which change is realized and as a potential outcome of social dynamics. Our aim is not to provide the true, authentic definition of transformations, or the one we think everyone else should now follow. Rather, our aim is to maintain fundamental openness of the term, whilst distinguishing it from proposals that amount to the preserving, entrenching, or expanding of the logics and dynamics of the status quo. Similarly, our hegemony-centric lens to transformations should not be considered as new and yet another analytical framework. Rather, we use the insights from the existing frameworks, but position them in relation to political and cultural hegemonic structures and logics, which we believe provides a useful critical appraisal and contribution to the existing literature.

This paper begins by defining and exploring the two key concepts of inclusion and transformation in the context of a broader theory of the social sphere drawn from the works of Laclau and Mouffe. From there we develop an analytical approach for socioecological transformations, identifying three key blocs—hegemony-reinforcing, hegemony-replacing and hegemony-transcending transformations—which differ in how they engage transformational and inclusionary political logics in relation to the processes and outcomes they advocate and pursue. The paper concludes by exploring the potentials of our framework and typology for conceptualizing, analysing, and strategically pursuing various transformative agendas.

Theorizing inclusion and transformation via hegemony

Laclau and Mouffe's hegemony

This article's position on transformation and inclusion are mainly developed with reference to the works of Judith Butler (next section). However, as their own work on transformations heavily draws on political theorists Ernesto Laclau and Chantal Mouffe (L&M), we engage L&M work directly to outline the key concepts. For L&M, the social sphere is constituted through discourses that link together and in various ways change or constitute the diverse elements within

them, e.g. individuals, materials, concepts, etc. (Laclau and Mouffe 2014, pp. 91–93). Discourses are defined by specific logics (political and social logics), which can be framed as the codes that unify elements and link them together according to particular relational structures of meaning. These logics define the 'horizon of possibility' for a given discourse—the possible identities, framings, and ways of relating that are possible on the terms of its internal structures (Butler et al. 2000, p. 13). Laclau argues that in addition to focusing on what he conceives as transient and unstable social categories such as classes, ethnic groups, or 'law', it is equally critical to identify and explore the common 'political logics' that define how discourses are constituted and dissolved within the social field (Butler et al. 2000, p. 53).

For L&M, discourses are not mere cultural frameworks sitting atop an unchanging material world. Instead, they conceive them as ontologically active agents that build the material, conceptual and phenomenological worlds we live in. Indeed, Butler and colleagues assert that all discourses operate both performatively via actual, everyday practices and interactions (Butler et al. 2000, pp. 14, 41). L&M, on the other hand, emphasize that discourse generates real material realities such as the design of landscapes or market relations, thus transcending any binary between idealism and materiality (Laclau and Mouffe 2001, p. 94). Additionally, L&M frame the social space as open, e.g. no single discourse or collection of discourses can ever fully and securely articulate its totality (Laclau and Mouffe 2001, pp. 77–102). L&M explain this by asserting that discourses are always just as defined by what they exclude as what they include, e.g. exclusion of some sort is a necessary feature of hegemony (Laclau and Mouffe 2014, pp. 129–130). Indeed, such systems of inclusion and exclusion are essentially synonymous with what we term discursive logics. Even the most universal of discourses must draw a boundary around itself to be a functional whole. As a result, there is always something that necessarily escapes its reach (Laclau and Mouffe 2014, p. 128).

Hegemony, in this context, can be defined as the dominance of a particular set of constituting and unifying discursive logics within a social sphere (Laclau and Mouffe 2001, pp. 122–123). Dominance, in this framework, is achieved not through the inevitable unfolding of historical dynamics, but rather a contingent, political creation and the result of the operations of power, which is an assertion of unity established through antagonism with other discursive formations in an open and always changeable social field. Hegemonies expand by claiming and assimilating the elements of other discourses into their own frameworks. Nonetheless, hegemonies are only ever relatively unified because, as noted previously, elements can never be fully fixed within just one role or identity (Laclau and Mouffe 2001, pp. xii, 107–108). As a result, even the strongest and most totalizing of hegemonies are criss-crossed by antagonisms and pressures from other discourses. Their elements are always defined by a broader range of interactions than those associated within their hegemonic frameworks, and hegemonies are always threatened with the possibility of their own dissolution (Butler et al. 2000, pp. 55–56).

Inclusion and transformation

This section delineates a 'political logics' typology centred on two key logics—inclusion and transformation—functioning at two key levels: as processes and as outcomes of social change. Regarding outcome of transformations, in cases where the various social interplays associated with a given policy, policy domain or political agenda result in the radical reorganization of the logics and structures of its associated hegemony, we term the resulting outcome 'transformation'. This notion will appear familiar to those engaged with radical transformation literature, as it aligns closely with definitions of 'radical' transformation. We argue that such transformations can take several forms. First, they can involve the replacement of one hegemony with another rooted in a different set of organizing logics (Butler et al. 2000, p. 176). Second, they can involve the profound reorganizing of a hegemony which achieves the same effect—e.g. a radical change in the logics of a formation—via reform rather than total replacement. Finally, a hegemony can dissipate, resulting in a disaggregation of the social sphere such that no single set of organizing logics continue to govern the space they formerly articulated (Laclau and Mouffe 2001, p. 130).

In cases where the hegemony has not undergone such a radical shift, we argue that any changes or expansions in its scope and the system of relationships with which it is associated have been guided by a very different logic we term 'inclusion'. In such cases, the logics of the hegemonic formation have been preserved. As a result, the onus to change is shifted onto any new elements drawn within its orbit. These are included on the terms of the hegemony, whilst the hegemony itself remains unchanged. From a Butlerian perspective, the expansion of a hegemony on these terms should be conceptualized as a process of pure colonization. It is the absolute, violent obliteration of otherness to expand the reach of the same (Butler et al. 2000).

The second major question for our framework relates to the process by which change occurs: when an element and a hegemony encounter one another and a relationship is established between them, which of the two is forced to change to accommodate this new connection and on what terms? In inclusionary process, the onus to change lies on only one of the two parties. This can work in one of two ways. First, the onus can be placed on the element to change on the terms of the hegemony, thus generating the previously identified inclusionary outcome. Alternatively, we argue that

inclusionary dynamics can also work in the opposite direction. In these cases, an element or non-hegemonic discourse expands at the expense of hegemony via what we may term a counter-hegemonic struggle (See L&M's conception of this struggle: Laclau and Mouffe 2001, pp. 174–177; Butler et al. 2000, p. 306). When successful, the result of such processes is the replacement of a previously dominant hegemony with a new one. We frame this kind of replacement as a transformative outcome, since the result is a radical rearticulation of the social field, but it is achieved through an inclusionary process which is essentially the same as those deployed by ascendant hegemonies seeking to maintain or expand themselves.

In a transformative process on the other hand, the onus to change is borne by both parties. Here we draw from Butler, as well as from Iwona Janicka (2017), who have gone into substantial detail regarding the form taken by 'real' encounters of this sort in which both sides actually and radically engage one another rather than simply imposing themselves or bending to impositions. The central point here is the idea that if individuals or discursive structures are to legitimately engage and respond to the injunctions and demands they encounter in the world, they must find a way to make sense of them within their pre-existing cultural lexicon, discourses, etc. In a transformative dynamic, therefore, the systems of power which insulate both hegemony and elements from engaging one another are lowered or negated, and, unable to accommodate the external elements they face within the terms of their pre-existing frameworks. This in turn leads to a process of radical discursive rearticulation (Butler 2012, pp. 12–13).

From a Butlerian perspective, any encompassing framework of what transformation should entail will always be insufficient. It is not just because such a framework may fail to cover all the key issues, perspectives, etc. that need to be considered in conducting such a shift, but rather because truly transformative dynamics are located exactly at the limits of what such frameworks can conceive of (Butler 2012, pp. 12–13). It is this aspect of going beyond—this radical and unhinged quality of transformation as a true 'step into the unknown' that defies comfortable inclusion into any step-by step plan. Hence, this differentiates a transformative process in its purest sense, and the entire approach to social change, from the inclusionary dynamics identified previously (Janicka 2017, p. 76). As we shall see in our later analysis of major approaches to tackling socioecological crises, this is a vital and necessary element of many radical and hegemony-transcending transformative visions and, therefore, needs to be acknowledged and engaged in all its unsettling reality and implications by those that take the realization of such agendas seriously.

The difference between processes of inclusion and transformation is a spectrum, with inclusionary dynamics being associated more closely with the expansion of the 'same' and transformations being linked with an opening up to 'the new'. Table 1 presents a typology of transformation and inclusion, differentiating between two central elements, that is the process and the outcome of the change.

Butler highlights that there are dangers associated with engaging such processes of transformation, asserting that there is always a risk that such processes will result in changes opposed to agendas one seeks to pursue. They do not make any normative claims regarding the relative moral or technical superiority of hegemonies vis-à-vis their externalities. Nonetheless, they emphasize the significant costs associated with seeking to wall our politics off from them. Butler argues that transformational processes are absolutely necessary to a politics seeking to achieve justice for marginalized experiences (e.g. Butler 1990, 2009, 2012). This is because their exclusion is often written into the very historical foundations of concepts such as justice generated within hegemonic horizons (Butler et al. 2000, p. 178).

Developing and applying a hegemony-centric approach to transformations

In this section we develop and subsequently apply a hegemony-centric approach to transformations. To develop and describe the analytics of this approach, we situate the existing literature within the categories presented in Table 2, proposing and outlining the multiple approaches of dealing with the multiple socioecological crises (Table 2). We explore the common conceptual and operational qualities associated with these blocs and categories. This analytical approach can be applied for exploring the transformative potentials and the lack thereof in any other field of literature and policy

Table 1 Transformations and inclusions

	Inclusionary	Transformational
Process of change	Logics of the expanding hegemonic or counter-hegemonic discourse remain unchanged. Elements are integrated and changed on the terms of these logics.	Both hegemony and elements undergo change as a result of their encounter via 'translations' that go beyond the constituting logics of both.
Outcome of change	Consistent logics of hegemonic formation and operation are maintained throughout the period analysed.	Constituting logics of the hegemony are radically reorganized, replaced, or dissolved.

domain, including green growth and bioeconomy, which are dealt with and advanced in this Special Issue.

Hegemony-reinforcing transformations: eco-modernist, market-based and socio-technical approaches

Recognising the risk of homogenizing different approaches that may fall within this bloc, for the sake of analytical utility and clarity we place them together under the heading hegemony reinforcing transformations. Eco-modernism generally presents socioecological crises as technical, suggesting socio-technical solutions and innovation for improved efficiencies, as well as market-based mechanisms to manage action and human behaviour (Bäckstrand and Lövbrand 2006; Nightingale et al. 2019). These approaches are linked with a Western, universalist episteme that explicitly or implicitly denies or delegitimizes diverse conceptions of knowledge and different ontologies and asserts an unmediated access of their theories and scientific methods to the truth of the world (Schöneberg 2019; Escobar 2020; Nightingale et al. 2019; Pascual et al. 2021). They also commonly assert optimistic goals and scenarios, and rarely question the ability of the present socio-economic structures to address the challenges we face. As asserted in the 2015 Eco-modernist manifesto, "by committing to the real processes, already underway, that have begun to decouple human well-being from environmental destruction, we believe that such a future might be achieved. As such, we embrace an optimistic view toward human capacities and the future" (Asafu Adjaye et al. 2015, p. 31). The solutions they outline tend to be presented as the only realistic, viable and scientific options in our present circumstances—approaches that can be carefully charted and planned on the terms of our present realities; and therefore dismiss alternatives as unscientific, irrational or fantastical (Asafu Adjaye et al. 2015; Escobar 2020).

Thus far, such approaches have been by far the most widely embraced and operationalized within the international and EU environmental policy spaces, including the bioeconomy policy domain (Eversberg et al. 2022; Ramcilovik-Suominen et al. 2022; Vogelpohl 2023). Whilst there is a diversity of approaches associated with eco-modernism, market-based and socio-technical solutions, a substantial body of literature asserts that such proposals based on eco-modernism perpetuate the same old hegemonic approaches to global governance with minor, incremental, or aesthetic changes (Feola 2015; Holmgren et al. 2022; Vogelphl 2023). The current fixation on numerical targets such as net zero deforestation and net zero emissions reveals their level of embracement in international environmental governance spheres (McDermott et al. 2022) and landscape restoration (Schultz et al. 2022). Dominant political logics embedded within these approaches are those of efficiency, competition, innovations, economic growth, and market superiority. Common for such approaches is the lack of direct engagement and critique of logics such as perpetual economic growth, extractivism, neocolonialism and racialised capitalism, that is the politically enabled appropriation of resources, landscapes and territories in other parts of the World for an imperial mode of living (Brand and Wissen 2018).

In proposing solutions that are amenable to the pre-existing structures of the global hegemony, such 'transformations' grant a radical sounding aspect to what is fundamentally the ongoing perpetuation of the status quo. When linked with its structural power, they often serve to defend, legitimate and insulate hegemonic systems from appeals for more radical changes whilst working to generate new mechanisms for expanding their reach and penetrative power. 'Green sacrifice zones' for example describe spaces in which the adoption of environmental 'fixes' legitimate the expansion of a wide array of exploitative and extractive dynamics (Scott and Smith 2017; Zografos and Robbins 2020) and have been linked with the development of a large range of sustainable projects and infrastructures (e.g. Bastos Lima and Gupta 2014; Del Bene et al. 2018; Brock, et al. 2021; Dunlap 2019; Sovacool 2021). Eco-modernism's unwillingness to engage or even contemplate encountering radical externalities, coupled with a general unwillingness to seek to traverse the terms of our presently dominant system firmly places these approaches at the inclusionary end of our spectrum both procedurally and in terms of the outcomes they serve. The limits such approaches set on the horizon of

Table 2 Inclusion and transformation: from hegemony reinforcing to radically transforming a hegemony

Category name	Key qualities	Examples of associated transformation theories
Hegemony-reinforcing transformations	Inclusionary processes and inclusionary outcomes.	Eco-modernist transformations.
Hegemony-replacing transformations	Inclusionary processes and transformational outcomes.	Ecological or planetary boundaries-based transformations, Modernist Leftist, realist-based transformations.
Hegemony-transcending transformations	Transformational processes and transformational outcomes.	Decolonial transformations, anti-foundationalist transformations, e.g. eco-feminist standpoint-theory-, and decolonial environmental justice-based conceptualizations and approaches.

possibility have been illustrated once again by the COP 26's failure to respond to the escalating climate crisis humans and humanity face (Montague 2021). Rather than transformative, such approaches are often the opposite—reactionary appropriations and co-optations of critical elements and desire for radical change. They do not challenge the hegemony—they are the hegemony.

Hegemony-replacing transformations: planetary limits- and Anthropocene-based approaches

The second bloc focuses on transforming the social sphere by replacing the global hegemony by inclusionary claiming and rearticulating its elements on the terms of a clearly identified counter-hegemony. This bloc is differentiated from the third by placing the greatest emphasis on achieving certain outcomes rather than on the nature of the processes of change. One of the largest branches of transformation theory that operates on such outcome-centric terms is what we term 'planetary limits' approaches to transformation (Folke et al. 2021; Steffen et al. 2015b; Vivien et al. 2019), which focus on questions of ecological boundaries and which often links to the idea that we have entered a new geological era in which humanity plays the most significant role in influencing global environmental systems termed the Anthropocene (Crutzen 2002; Steffen et al. 2015a). Once again, we place this branch together with another strand of approaches, which while clearly different in aims and political logics, resembles the former in terms of relations to hegemony. This second brunch can be broadly and generally described as Marxist, emphasizing the role of capitalism in generating our present socioecological threats. We highlight that there are many fractions of Marxist and eco-socialist approaches, but differentiating between them is beyond our aims and purpose of this article. Approaches in this wide and broad brunch place central political emphasis on ending capitalism—often with a narrow focus on fossil capitalism only—omitting the logics and mentalities that drive capitalism and Anthropocene (e.g. Foster 2015, 2016; Huber 2021; Malm and The Zetkin Collective 2021).

Approaches associated with this bloc tend to assert that certain socioecological threats are so clearly evident and overwhelming that they must take priority above other social or political concerns (Foster 2015; Huber 2019a; Malm 2020, 2021). Because qualities of the present hegemony reproduce the threats these approaches aim to transform, they determine that it must be replaced or overthrown either through major system-wide reforms or through revolution (Foster 2015; Huber 2019a; Malm 2021). Additionally, the approaches in this bloc, quite like those associated with ecomodernism, tend to claim that the threat posed by our present socioeconomic system can be clearly delineated with reference to scientifically verifiable boundaries and scientific data, such as the regenerative capacities of ecological and biophysical systems (Ramcilovic-Suominen et al. 2022). As such, they assert that certain expert knowledge—e.g. ecology, carbon accounting—should play the central role in determining the changes necessary to preserve life on earth (Steffen et al. 2011; Huber 2019a; Folke et al. 2021). As stated by Folke et al. (2021, p. 43), "Science provides informed consensus on the facts and trade-offs in times when politics provides only misinformation and polemics". We do not intend to discredit this scientific knowledge or its insights, all of which are well positioned to make powerful critiques of the operations of our present system, and de-facto enable shifts and changes. However, we highlight the lack of attention to plurality of knowledges, gendered, situated and place-based experiences, emphasized by ecofeminist and decolonial schools of thought, which make important contributions concerning whose science, whose knowledge and whose experiences count and whose do not in the 'planetary limits-' and Anthropocene-based approaches (Haraway 2015; Mehta and Harcourt 2021; Meriläinen et al. 2021; Sultana 2022). In that sense, it is primarily the political logics that separate this bloc from the next one, which emphasizes the pluralistic and emancipatory political logics, as well as the importance of values and qualities of the process, rather than the destination.

The question they centre is by what means, in the context of complex and hostile political circumstances, to enact the changes which expert, scientific, and mainly Eurocentric knowledge determines as necessary. This mindset is illustrated by Malm in his effort to conceptualize a viable model of overthrowing fossil fuel capitalism (Malm 2020, 2021; Malm and The Zetkin Collective 2021), as well as in Huber's framing of the question facing voters in the 2019 US election: 'The real question is which candidate's election is most likely to lead to the kind of mass movement needed to force elites to concede to radical climate demands' (2019b, paragraph 25). Again, whilst we can sympathize with such calls in terms of an ecological political agenda, at a theoretical level we emphasize the lack of a broader vision of emancipatory politics that feminist, decolonial and postcolonial scholars conceive to be central to transformations. There is a tendency to minimize the relevance of onto-epistemological plurality and relational worldmaking and maximize the 'real' 'material' issues and threats we face (Bluwstein 2021). Many simply ignore the topic altogether when discussing questions of political tactics and movement building (e.g. Steffen et al. 2011; Huber 2019a; Folke et al. 2021). In this literature, 'production and consumption must go down in the North, regardless of how we conceptualize and make sense of these material phenomena'. Given the urgency of the threats we presently face and the entrenched and organized structures of power that must be overcome to address them, we can readily understand the appeal of

this quality—these are serious times, and they demand serious, radical and tactically savvy solutions. We especially endorse the efforts of such theorists to call out 'transformative' approaches which fail to radically challenge the present system's pivotal destructive dynamics.

Nonetheless, we join L&M, Butler, and a wide contingent of decolonial, feminist and some degrowth and anarchist scholars (e.g. Abazeri 2022; Akbulut et al. 2019; Dengler and Seebacher 2019; Dunlap 2022; Hanaček et al. 2020; Hickel 2021; Nirmal and Rocheleau 2019; Paulson 2021) in acknowledging the significant limitations associated with purely planetary-limits and Anthropocene-based approaches. Decolonial feminist theorists have critiqued such approaches on the basis that whilst biophysical processes must be acknowledged, their functional significance can only be understood relationally, through a multiplicity of local perspectives and experiences which are flattened by the universal narratives of scarcity centred theories (Luks 2010; Mehta 2010; Mehta et al. 2019, 2021). As Mehta and Harcourt (2021, p. 2) puts it "all physical indicators concerning 'limits' are mediated through particular scientific models, assessments and cultures. They are therefore shaped by incomplete knowledge, uncertainty and a particular 'social life'". Serious times require serious, radical solutions, but we must honestly acknowledge the limits on the horizon of possibility imposed by any apparently expedient shifts towards political foundationalism.

Hegemony-transcending transformations: open-ended, evolving, heterodox, deep and uncertain approaches

The third and final bloc aims to bring about transformative outcomes via what we described above as transformative processes. Such approaches tend to frame their agendas as emerging and evolving over time through ongoing, open-ended, evolving and therefore changing on the way, as well as heterodox and clearly counter-hegemonic approaches, which are not pre-determinable with reference to expert knowledge or political ideology. The bloc tends to also favour more open, relational and collectively constituted realities compared to those of the previous two blocs (Garcia-Arias and Schöneberg 2021; Escobar 2018; Schöneberg 2019; Dengler and Seebacher 2019; Visseren-Hamakers et al. 2021; Vogel and O'Brien 2022). There is a diversity of literature and social movements associated with this bloc, with popular approaches drawing on often eclectic mixtures of theories linked with eco-feminism, decoloniality, and increasingly eco-anarchism (Dunlap 2022). It is also heavily rooted in and influenced by historically marginalized theoretical perspectives associated with indigenous peoples and the cultural and economic 'peripheries' of the 'Global South' (Álvarez and Coolsaet 2020; Dengler and Seebacher 2019; Kothari et al. 2019; Escobar 2020; Mehta et al. 2021; Sultana 2022).

A significant example of a school of thought associated with this bloc is pluriversal politics, an approach to transformative change which brings together a critique of 'modernity', which it links with a "one world 'world'" (Escobar 2020: 9) governed by common, universalist logics, a leftist commitment to universal emancipation. The focus is on the onto-epistemological aspects of politics and on opening space for a multiplicity of ways of being to cohabit the world, and a commitment to political autonomy as a fundamental requirement for marginalized groups (Escobar 2018, 2020; Kothari et al. 2019; Rajan et al. 2021). Another set of examples are associated with degrowth literature, which is critical of economic growthism (e.g. Hickel 2020; Kallis et al. 2020), in close dialogue with decolonial theories and methods, allowing for a decolonial degrowth perspectives to emerge (Abezeri 2022; D'Alisa et al. 2014; Dengler and Seebacher 2019; Escobar 2015; Gram-Hansen et al. 2021; Hickel 2020, 2021; Nirmal and Rocheleau 2019). The methods associated with this bloc are linked to social movements and activism in both the Global North and South (Escobar 2015, 2018; Akbulut et al. 2019; Kothari et al. 2019; Temper 2019; Dunlap 2021). Degrowth is also a central element in various social movements and many emphasize the importance of linking the theory of degrowth with praxis (Ziai 2014; Escobar 2015; Asara et al. 2015; Parrique et al. 2019) and it has become an influential framework amongst environmental movements such as extinction rebellion (Seaton 2020). Finally, examples of approaches in this bloc include a wide array of indigenous and grassroots movements, including but not limited to Rojava in Syria (Dirik et al. 2016), Buen Vivir in South America (Ziai 2014; Ranta 2018; Acosta 2020), the Wet'suwet'en anti-pipeline and sovereignty struggle in Canada (Temper 2019), and the Zapitistas in Mexico whose slogan of 'a world in which many worlds fit', has been a touchstone in the development of pluriversal theory (Escobar 2018, 2020; Mignolo and Walsh 2018).

The bloc's heavy emphasis on collective processes is often linked with a desire to reorder the social sphere on terms that do justice to a wider variety of experiences, relationalities and onto-epistemologies. The approaches in this bloc heavily critique the role of power and the social production of knowledge in constraining the field of political vision, and in defining how policies and other social 'solutions' are conceptualized and implemented, which they argue perpetuate many of the most significant global structures of inequality and oppression. Proponents have come to the conclusion that truly radical transformations are only attainable through truly radical, collective and relational processes of world-making (Escobar 2020; Rajan et al. 2021). Finally, such approaches commonly emphasize the importance of

autonomy to transformative processes, which in hegemonic terms can be framed as breaking down of the structures of the dominant hegemony on terms that actively assert the sovereignty and relational agency of marginal communities (Escobar 2020; Dunlap 2022).

The approaches in this bloc, despite their diversity, commonly embrace Butler's 'step into the unknown' as a necessary component to transformational changes. As Butler states in an interview: "I think many people recoil from this possibility, fearing that which is not predictable will lead to full-scale nihilism. And it is, in a way, a risky movement in politics. What the new form of universality brings will not be necessarily good or desirable and the politics of judgement will be brought to bear on what arrives. But it is equally true that nothing good or desirable will arrive without the new" (Butler and Connolly 2000). Nonetheless, it is important to acknowledge that uncertainty is indeed a challenge that any effort to fight for hegemony-transcending transformations must be equipped to navigate. As the proponents of radical transformative approaches argue, if any step into the unknown is to be positive, it must be taken collectively, relationally, and on terms that are deeply conscious of and engaged with the logics of domination and systems of power they oppose (Janicka 2017; Kothari et al. 2019; Escobar 2020). In taking the full expanse of marginalized experiences as a critical starting point to conceiving of and pursuing change, they also resist risks of embracing 'post-truth' and reactionary standpoints which serve to mask, preserve or entrench hegemonic logics and structures of power and privilege (Neimark et al. 2019).

As might be anticipated from its diverse theoretical roots, there are substantial divergences amongst varying branches in this bloc regarding what transformations ought to involve and how they should be achieved, and their proponents are often fiercely critical of the shortcomings of one another's approaches. An example is Chandler and Reid's harsh critique of decolonial theory (2020), which they accuse of having tendencies towards cultural essentialism and of appropriating of indigenous and marginalized voices. Another is the anarchically rooted criticisms of Dunlap (2022, 2021) who claim that decolonial theories all too often remain implicitly state-centric and affirm various unjust hierarchies in the name of respecting cultural difference. These are valid emerging critiques of the third block. Acknowledging the legitimacy of such assertions, there is nonetheless a shared vocabulary and purpose which links the ideas in this bloc together, especially when compared to the previous two sets of approaches. Moreover, from the perspective of our framework, such critiques underline the bloc's shared commitment to the necessary role of processes of ongoing (re)construction and radical unhinging.

Conclusions—the way beyond

The findings of this paper should be of use to activists and researchers interested in both in how transformations work and in how to tactically realize them in practice. The utility of this framework, however, is considerably broader. By taking a step back from the question of what transformations seek to achieve in a programmatic sense and focusing instead on the political logics they need to engage with to achieve their goals, our framework highlights critical structural differences between different approaches to saving the world offered in policy and practice. That said, this framework holds utility for anyone seeking to analyse any sort of socioecological shifts, or policies, that have been identified in some fashion as transformational. It clarifies the political space that different approaches have access to fighting for the changes they want to bring about. Some of them must engage dynamics that we classify as transformational—either in terms of outcomes, processes, or both—as necessary elements of their political strategies. Others, put simply, do not, and those pursuing them might be equally or better served in adopting tactics we identify as inclusionary.

Significantly, whilst the different blocs described in our analytical lens to transformations align with those of more widely recognized branches of political theory, such as different varients of Marxism, decoloniality, eco-anarchism, and eco-modernism, for example, they just as often cut across them. From the perspective of the political logics they necessitate, some Marxist transformation models for example may have plenty in common with pluriversal approaches. Such findings have substantial tactical significance for activists and members of social movements seeking to build alliances and to advance their causes by providing an additional, novel lens through which to identify social movements with which they may find certain synergies and those which engage methods and agendas that are structurally antithetical to the realization of their own goals.

We believe that only radical reordering of the global hegemony on terms collectively determined and generated is capable of doing justice to a full range of otherwise marginalized experiences, and that such is only possible via methods that are radically collective, relational, power-conscious and which maintain an ongoing openness to a complete reformulation; all the way down to their onto-epistemological foundations, via exposure to otherness. This, however, does not mean that all the approaches we place under the umbrella of hegemony-transcending transformations will by default be positive or without drawbacks, but rather that there are potentials to transcend our horizons of possibility associated with this bloc, which the other two approaches foreclose.

We hope that our framework for analysing transformations will be specifically useful to academics and activists seeking to understand and pursue counter-hegemonic and radically different visions in various political spheres. For example, our transformation/inclusion framework may serve as a useful lens through which to analyse the formal structures and historical operations of various social spheres and policy frameworks, such as for example, just transitions, green transition, bioeconomy, degrowth, or decoloniality. It provides insights into their potential to realize certain transformational agendas within the bounds of their 'legal hegemonic' organizing logics, and it is a step forward to developing new empirical tools for exploring transformative potentialities, called for by Krüger (2020). That being said, we highlight that it is important to resist the pull to engage such insights in developing clear road maps and prescriptions on how to navigate transformations, regardless how tempting it might appear from a policy-making perspective. Hegemonic power has a habit of out-manoeuvring, deradicalizing and normalizing political strategies that have previously been successful, so we should be careful about assuming that since a set of circumstances or tactics enabled transformation in one case, or even in several cases, that they can be expected to continue to do so in the future and in other socio-political contexts and spheres.

We also want to re-emphasize that we do not wish for our transformation framework to be treated as a new and definitive one for defining or understanding transformation. Such an imposition of a conceptualization which, drawing primarily from L&M and Butler, is overwhelmingly rooted in the western theoretical tradition and would therefore clearly represent yet another example of exactly the kinds of intervention rightly criticized by so many decolonial theorists. Rather, our aim has been to put the concepts furnished by Butler in dialogue with the fullness of socioecological transformation theories and to expose both of them to the possibility of radical reformulation in the process of undergoing such encounters. The radically transformative approaches identified by our analysis have not simply provided examples that illustrate Butler's ideas, but have also challenged them, demonstrating a diversity of pathways through which to practically undergo and embody transformative processes, whereas Butler can only gesture in the direction of such possibilities. Ongoing processes of reformulation on the terms of new social circumstances will be necessary for our framework to maintain ongoing utility and we welcome such re-appropriations.

In handing this text over to the creativity of future users, we wish to close by re-emphasizing perhaps the most profound insight on transformation that Butler offers us—that try as we might to build frameworks or apply methods that we hope will guarantee us safe passage, we cannot escape the reality that when we undergo the kinds of unhinging from the safety of our conceptual moorings that such processes necessitate, we are truly taking steps into the unknown. The crises we face and the hegemony that sustains them are riven with antagonisms and saturated with power and violence. Overcoming this order and building a truly collective world will require all of us to undergo radical, unpredictable changes, and this is particularly true of those centred by the present hegemonic order. If we are to hope for the possibility of a world beyond the cataclysmic dead end that we find ourselves facing, we must be ready to take the plunge.

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