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INTRODUCTION

The politics of environmental education. Critical inquiry and education for sustainable development

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The geo-political epistemologies of education for sustainable development

Ten of us with extensive experience in environmental education (EE) and its research (EER) in different parts of the world are “assembled” (Law, 2004) in this Special Issue (SI). We individually and collectively provide a “critical reaction” (Stevenson, 2013, p. 154) to the political processes of policy making in education contributing to the sustainability (or otherwise) of sustainable development. We also probe some “what next?” implications. We were invited to contribute to the SI because of our historical commitments to critical perspectives of EE and education for sustainability (EfS) and its *modern* development (ESD). These overlapping fields are undergoing a series of global transitions, including the *postmodern* acceleration of the changing modes of intellectual exchange and their digitalized-abstracted (re)constitutions of “extended” human, social, cultural, environmental, and ecological formations (Sharp, 1985).

Our interests in EE, ESD, EfS, and EER include the democratization of the field as that might *practically* and *agentially* be achieved through the flux of philosophical framings, theoretical orientations, and methodological perspectives, empirical insight based on rigorous evidence, and their reflexive “dialectic” with ongoing normative matters of a practical type about education, environment, development, and sustainability.

Bob Stevenson (2013, p. 154) concluded that for “too long” critical reactions to policy have been “silenced and the agency of respondents is not acknowledged or supported.” In this SI, we replace that silence with our “voices” whose message is to encourage agencies that previously have escaped critical representation in EE and ESD. The aim is to enable future imaginaries within an understanding of the plausible limits of EE and ESD. In so doing, silences, absences, and their potential for different agencies might well now be revealed in the narrative continuities and discontinuities—locally, regionally, nationally, and now, transnationally—as the discursive tensions between EE and ESD in education policy making have (r)evolved over the past two decades under the globalizing banner of, for example, the United Nations Decade of Education for Sustainable Development, 2005–2014 (DESD). And, inevitably, into the future as “new” policy imperatives such as the UNESCO Global Citizenship Education, 2014–2017 (GCED) and Global Goals for Sustainable Development, 2015 (GGSD) are ushered (or rushed) in due to the absence of critical reactions.

At broader issue here, therefore, is the ongoing narrative of EE, replete with its “identity politics” of the past four decades+ (for example, Palmer, 1998). That complex history resists being simply wished away because of the absence of critical scholarship, as Stevenson rightly concluded. Arguably, the always unfolding, eclectic, and increasingly diffuse field of EE has now *temporally* and *spatially* entered an *intergenerational* and *transnational* stage in its global “development” as the reach, affects, and impacts of ESD “stretch,” invariably with a politically messy mix of anticipated and unanticipated social and ecological consequences, some of which are revealed in this assemblage. Moreover, this now

continuously abstracted and accelerating, as well as intensifying, “meta” scale development of the (once) fairly focused field of EE exhibits an increasing degree of ahistoricity and, perhaps, atheoretical narration, or storying, adequate to the task of deconstructing and reconstructing EE and ESD within the globalizing specter of various neo-liberalisms. This ideology’s various imperatives and ambitions, as well as expectations, are worked through in various forms and practices in Education, such as policy making in ESD and what is reconstituted “developmentally” in the contemporary modern as “sustainable” (or not). Those educational problematics of sustainability, it must be said, are also found in the all too easily presumed hegemonic “trickle down” and now abstracted/colonizing “download” (or counter hegemonically not!) into dominant enactments (or contestations!) and agencies (or resistances!).

We are mindful of these tendencies and tensions, in our respective and respectful ways in this SI—sometimes convergent and sometimes divergent, and in the manner and style we interpret and understand EE, ESD and EfS. Our critical interpretations and representations of the EE equals ESD are, therefore, also (partially) responsive to how the cultures of academia and socio-ecologically engaged scholarship, based on our individually extensive and collective efforts in research in different “geo-epistemologies” within their respectively colonized “locations of knowledge” such as the “Latin America” (Canaparo, 2009), might be “reversed” in contributing publically to a “global” conversation about the “developing” need for localized knowledge generation processes informing “translocal” policy makings, implementations, enactments, and evaluations in ESD.

In contributing reflexively to such an overdue critical conversation, we celebrate the *modern* narrative of EE and how it has unfolded unevenly over the past four decades. We acknowledge the different orientations, paradigms and ideologies in environmental education (for example, Fien, 1993a); the importance of revealing the ontological presuppositions, epistemological assumptions, and methodological preferences in EER (for example, Robottom & Hart, 1993); their materializations over time and space in the anglo-speaking north/west as variable, often conflicting “currents” of practices of EE (Sauve, 2005); the “post transitions” in inquiry perspectives in EER (Hart, 2005); their “storying and restorying” as *postmodern* type cultural narratives discursively (or “poststructurally”) reconstituting the “fields” (McKenzie, Hart, Bai, & Jickling, 2009); the renewed need for a distinctive “language” of environmental education and “needs talk” about the values of sustainable development pertinent to education (Le Grange, 2013a, 2013b); and a “state of the art” and “first” international handbook of research on environmental education (Stevenson, Brody, Dillon, & Wals, 2013). All culminate in, arguably, more sophisticated insights about EE that can be applied to, for example, the broader contexts of curriculum research and its “traditions” and “new niches” (Lotz-Sisitka, Fien, & Kettlhoilwe, 2013). Undoubtedly, another benefit is the heightened interest in our own “preconceptions and positionings” in the framings and namings of inquiry driving research efforts and activities (Hart, 2013). In this SI, this developing sophistication focuses sharply on policy and its “making” in ESD, including implications for practices.

There is also a deeper reflexive problem of a “confessional” type in the SI about our own subjectivities and identities in EER. We concede a sense of “tiredness” in reacting “critically” to what has crept into the conversation about the relations of EE and ESD. Notwithstanding sporadic forays *within* the mainly Global North discourse of EER into, for example, the ‘language and meaning’ of sustainability development education (SDE) in EE (Gough, 2001, in particular Stables, 2001), the possibility of ESD (Stables & Scott, 2002) and more durable historical-materialist and realist critiques of policy and its practices in ESD (Huckle, 2008, 2009; Huckle & Wals, 2015), there can be no doubt that the academically driven discourse of EE and ESD in anglo-speaking geo-epistemologies has witnessed some sort of a merger, or marriage of academic convenience in the published representations of the field.

This “mashing” dilutes the meanings of critical and *critical theory* (for example, inspired partially by the Frankfurt School) as has been outlined previously in the context of the contributing authors’ historical commitments to EE, and this SI. Those commitments emphasize the normative pursuit of social justices in education, and education’s complicity in reproducing or reconstituting social, environmental, and ecological injustices in the mutually constitutive natures of theory and practice, hence the *praxis* of EE. Reflexivity, by itself, and sometimes conflated with “reflective practices,” are insufficient

in themselves, unless supported by the normatively disposed action orientation (and consequence) of praxis, in the “everyday.” Put differently, the namings and framings of EE and ESD are often used interchangeably, where the historical differences, purposes, interests, commitments, and tensions are (too) often conflated in the otherwise uncritically evolving narrative identity of the field and its embodiments in the authorships of that field. Whether or not these tensions can be “defused” (McKeown & Hopkins, 2003), more than a decade later, remains to be seen, but are unlikely *if* critical scholarship in both EE and ESD cannot regain some traction as a reconstructive critique/praxis of educational reform. Here, center-staged are the “politics of policy-making” and the agential role and relations of environmental educators and researchers with more than a passing concern about ESD’s mashings. Meanwhile, “new” educational policies of a global type are being rolled out under the slogans of sustainability, development, and citizenship—probably uncritically.

We feel there is a range of possible sources and reasons for this conceptual, practical, and bodied blurring and blending. As many of us directly and indirectly touch on in our contributions to this SI, there are two fundamental problems now renamed *critical EE* must continue to grapple with in making much clearer the purposes of EE and, by implication or consequence, ESD. The first overarching challenge is to deepen the critiques of the notions and practices of modernity (and postmodernity), and their elusive ethico-political relationships with equally evasive practices of development and sustainability. In short, as we read patiently through this SI, our contributors broadly hone in on how narrow Eurocentric/Western notions of modern development and its/their sustainabilities prevail in policy-making processes and education. A second prominent candidate contributing to the mashed homogenization of the discourse of EE, ESD, and EfS is the “stealth” revolution of neoliberalism (for example, Brown, 2015). Put simply, increasingly, global economic imperatives instrumentally determine the (Nation and Global) State (and its policies, curriculum, etc.) while the allegedly “sovereign/autonomous” Nation State now struggles to even partially manage its own economy and derivative, often regressive, social and environmental arrangements and formations. Effectively, neoliberal modernities convert *nature*, *homo sapien/politicus* and their *demos* to *homo oeconomicus*. Postmodernity accelerates, intensifies, and individuates the bodied and global entanglements of modernity and neoliberalism. Criticism and its praxis is demanded in EE.

Neoliberalism has overtly and covertly, visibly and invisibly, knowingly and unknowingly diminished the historical commitment and critical commitments of environmental education. Indeed, the rise of neoliberalism poses serious questions for the publicly published concepts of education, environment, sustainability and development. Paul Hart (2013, p. 507) now asks, “Can we see ourselves within our own terrain?” Or, do we misrecognize ourselves? And, indeed, what is the terrain? The need for critical histories of EE framed within the above confusions, entanglements, and mashings has never been greater *if* current diagnoses and future imaginaries are to have relevance, value, and usefulness, as we re-search for in the following pages. Moreover, the “traditional” meanings, purposes, rationales of education, environment, sustainability, and development require revisiting, as I suggest in the conclusion of this SI. The “currencies” of their assumptions and practices cannot be treated uncritically, as appears to be the increasing case of what is now represented and legitimized in the homogeneously mashed so-called “field.” Yet, for all that, critiquing neoliberalism in EE is a relatively easy textual/discursive task for a critical reflexivity devoid of normatively disposed praxis of EE and EER (Hursh, Henderson, & Greenwood, 2015).

That intense formative development of EE in the 1980s and self-scrutiny of it since, in and through a still *unfinished* EER, has not been demonstrated anywhere/time to the same extent in ESD. The authority and, perhaps, legitimacy of ESD, as it now mashes with EE, has escaped the critical treatment ESD’s evolution warrants. If so, the critical conversation and tension between EE and ESD, and role of EER, might well be “tired” at one level of analysis and critique, as some of us represented here in this SI remarked when first invited to “continue” this still (timely) conversation. At another level or layer of reconstructive critique, “fresh new steam” is, indeed, needed, as Heila Lotz-Sisitka (2016) rightly offers, and we collectively pursue.

This temporally-spatially and geo-politically embodied “layered” present, and future of ESD, is unlike the discourse of EE in the 1980s—a time that historically positions our “lead” author Stefan

Bengtsson's thesis about hegemony and the subsequent politics of policy making for ESD, as he case-studied in the contemporary context of Vietnam. There can be no doubt that hegemony, resistance, and related political interests, and competing agencies among such issues, remain an ongoing problem about the antagonisms of historical principles and agonisms about contemporary/future pragmatics as circumstances and conditions *change* inevitably and inexorably—personally, locally, nationally, regionally, and globally, as well as theoretically and methodologically. For example, in this SI, “respondent” contributors represent a wider transnational assemblage of insights and evidence gleaned in various geo-epistemologies/locations of knowledge from the Global South. Moreover, English is not the first language of the majority of conversation partners giving “voice” to a critical resistance/response in this SI. Our assemblage here partially achieves a transnational enlivening and revitalization of the conversation at the focused level of ‘policy’ and its politics of and in ‘making’ in ESD.

Positioning our selves

We openly concede the elusive manner in which the term *critical* is, and has been, used in EE. Perhaps that is a problem, as I have suggested previously in partially clarifying the way in which critical scholarship is offered in this SI, and contributing authors have “worked with” in their respective ways? Stefan’s “rejoinder” reminds us of that ethical(-political) ambiguity, tension, and dilemma. Our assembled aim, however, in reacting critically, following Stevenson (2013) in the way we position ourselves in relation to how the SI framing positions us is to identify serious issues, raise serious questions, employ serious empirical insights, and seriously probe the philosophical framings of the aims, purposes, progress, value, and efficacy of policy in ESD. And, by implication and reflexively, EE.

To foster the intense normative reflexivity to which critical EE and EER is distinctively committed we, unusually, openly declare our theoretical orientation and preferred methodological approach at the start of each of our contributions in “continuing the conversation.” Without this reflexive commitment, this SI, too, will tire in, perhaps, a vague, ironic, untimely, and agonizing manner. This must not occur as, perhaps, there has never been a more intriguing time to continue the conversation about the unsustainable politics of sustainability (Bludhorn, 2011) within the “newer” recognition and (scientifically) “acceptable” vocabularies of the Anthropocene and evidence about anthropogenic global warming and its consequences. To be sure, “climate destabilization” is one only of numerous environmental problems and associated local, national, regional, inter and transnational, and global issues. Toxicification of the air, chemicalization of the land ... and so on. But what about the “climate displacement” (Leckie, 2013) and the tsunami of “eco-refugees” as that issue struggles to attract any political or educational interest? Meanwhile, in the “developed” Australia, 80% of teachers demonstrate a lack of awareness or/and lack of comprehension about EfS, including the importance of EfS in the (school) curriculum (AESA, 2014).

Politics of policy? There is the “end” of the DESD. The verdict is still “out” about its value and efficacy, and costs, risks, and benefits that, no doubt, will be contested geo-politically-epistemologically (and methodologically) over time and space, as we do so in contributing to this SI. Transitions in policy, formulated for global purposes such as the UN’s 17 “Global Goals for Sustainability” to “end extreme poverty,” “fight inequality and injustice,” and “fix climate change” are already well underway. As admirable as those GGSD naming purposes might be, including “quality education,” this SI aims to “model” and anticipate key aspects of the critique that already needs to be leveled at how that next stage of abstracted, globalized policy transition, formulation, and derivations in, for example, the goal of quality education in enabling transformative lifelong learning opportunities for all, and its making in practices in a wide array of contexts and equally diffuse circumstances. Otherwise, we are doomed for more tired conversations. We believe otherwise.

Phillip Payne, on behalf of:

Stefan Bengtsson’s “lead” provocation on the status of hegemony in the politics of policy-making in ESD acts as a “new” scholarly catalyst for continuing the conversation about the problematic status of ESD/EfS within what that Tom Berryman/Lucie Sauvé (among other “old hands” represented in this SI) had concluded was ‘tired’ or ‘exhausted’ after nearly two decades of debate within EE. Stefan’s

“post Marxist” provocation is a revised version of an earlier draft that appeared in his recently completed PhD study (Bengtsson, 2014). His PhD developed a theoretical and analytical framework for understanding the “political” in education “from a social and global perspective.” In doing so, Stefan’s study was initially located in the dynamic nature of Swedish critical curriculum theory of “conflict,” among other educational concerns in the 1980s, as that curriculum dynamic was contextualized by the political relationship between education and society. Critical curriculum theorizing in education in the 1980s was a “consistent” feature of education in different parts of the world. It coincided with the rise in the late 1970s/early 1980s of an alternate “education for the environment” (in addition to *in/with* and *about* (for example, Robottom, 1987) that was theoretically re“named” as the “socially critical” perspective of environmental education as a pathway to sustainability (for example, Fien, 1993a, 1993b). The mention or referencing of EE in Stefan’s PhD dissertation is, however, rare. The conversation, debate, and tension between critical perspectives of ESD and critical perspectives of EE has, therefore, been acknowledged and incorporated into Stefan’s provocations about policy-making in ESD in this SI.

Stefan’s self-described “post-foundationalist and post-Marxist” formulation of a politicized theoretical and analytical framework draws from a range of authors beyond those informing Swedish curriculum theory. The theorists he drew substantively upon in his “dialectical historicist” and “deconstructionist”-driven PhD thesis included Durkheim, Dewey, Foucault, as well as Gramsci, Bourdieu, Heidegger, Derrida, Deleuze, Lacan, and Wittgenstein. Methodologically, Stefan’s analytical framework drew heavily on the discourse theoretical work of Laclau and, to a lesser extent, Mouffe.

Stefan foregrounds the status and characteristics, and assumptions and paradoxes, made about the notion of hegemony, as that problematically fluid notion, ‘works’ with antagonist effect in the globalizing discourse contexts of SD and ESD, as well as EE. His theoretical framework is then applied to the “policy making” case in Vietnam, where he studied and worked from 2012 to 2014 and where his case study about globalizing initiatives for sustainability and development was “read into” the changing educational climate of Vietnam, a State in rapid political, social and economic transition following decades of externally and internally imposed turmoil.

In response, Heila Lotz-Sisitka reveals how the underlying assumptions of the Westphalian inspired formulation of policy in ESD casts its makers, developers, implementers and enactors (and, presumably, evaluators) in a particular “colonized” way, drawing partially from Canaparo’s (2009) critical investigations of “geo-epistemology” and his call for a type of postcolonial and decolonized “reversal thinking” to establish some of the uniqueness of localized and regionalized epistemologies. Lotz-Sisitka cautions us to not retreat into forms of conservative localism. From a critical realist perspective, following Archer and Bhaskar among others who emphasize a materialist decolonization perspective, Heila extends Bengtsson’s call for an ontology of agency (and, by implication, epistemology) that reclaims a form of agency adequate to the demand for a transnational framing of policy-making in the Global North and South, the latter in southern Africa from which her research into the reconstructive praxis of ESD is sourced.

In different ways, Tom Berryman/Lucie Sauvé, Edgar González-Gaudiano, and Kelly Teamey/Udi Mandel substantively, geographically and methodologically “flesh out” Heila’s call for a post-Westphalian policy version of transgressive agency within the decolonized transnational public sphere. That transgression revitalizes the prospects of a collective, socio-material relationality capable of deep societal transformations of the type aimed for in environmental education praxis.

Tom and Lucie insist on sustaining and developing the diversity of EE, as has been the historical case in which their critical research has proceeded over the past two decades+, often in the Global South. Drawing on Berger and Luckmann’s notion of “ruling relations,” Tom and Lucie offer a reflexive critique of five assumptions made in Stefan’s analysis of the politics of policy making. They propose for policy deliberation four emergent “pillars” of internationally cooperative “ecodevelopment,” indigenous inspired *vivir bien*, alternative notions of economy as in “ecological transition” enabled through social movements of “degrowth” (Berryman & Sauvé, 2016, p. 109). They seek to reconceptualize perspectives on economy, people and society, environment and their interrelatedness within their various intersections, and overlays at local, regional, international, and global levels.

Edgar's response to Stefan's policy-making analysis and critique is located in his longstanding conceptual and empirical insights into the Latin American contexts and locations of knowledge, or historical-cultural geo-epistemologies pertinent to education, environment, development, and sustainability. He also employs certain "outside" ideas developed by Derrida, Žižek, Butler, and, like Stefan, Laclau, and Mouffe (González-Gaudiano, 2016, p. 18). Here, in extending that "Latin" research, in particular his ongoing critique of the neo-productivist and extractivist stage of capitalist development, Edgar's "tragic optimism" works from the different vantage point of the "constitutive outside" (p. 18). Like all others contributing to this SI, Edgar's contribution prioritizes a return to the materialisms and realisms of EE and EER if, as he asserts, confidence is to be returned to the otherwise constitutively abstracted and objectified "impossible discourse and texts/policies of ESD" (p. 18).

For many years, Bob Jickling has prosecuted the case for the concept of education in environmental education and related versions of its sustainability, or not, within the globalization of those concepts. As a philosopher of education and practitioner of outdoor/environmental education working here with Williams and Kuhn, Bob's contribution to the policy-making processes highlights how dissensus and contestation, as ways of thinking about policy, always destabilize the incorrectly presumed hegemony and authority of policy formulations like ESD and their "trickle down" effects in various contexts and circumstances. The possibility of ESD to act as a counter hegemonic policy demands "anomalous responses" in the "creative ways" ways we choose (or not) to think and converse about education's potential to "be" different and inform environmental and social policy formation. In a manner not dissimilar to Heila's critique of the dominance of the dominant Westphalian policy perspective, Bob highlights the limitations of the same (Western, dominant) Cartesian-inspired ontologies and epistemologies that he believes constrain the anomalous thinking of inspirations like "ecosophy," from Naess's "deep ecology," he derives from the field of environmental philosophy, through Weston, whose academic formalization four decades ago as "environmental ethics" coincided with the emergence of the field of environmental education (Jickling, 2016, p. 135).

Helen Kopnina's philosophically ecocentric contribution to the environmental justice interests of EE and its associated concerns about ESD conceptually extends and theoretically expands Jickling's call for ecosophy within the ontological assumptions that underly and inform the various epistemologies of education for sustainable development, including its policy-making processes and formations. She too draws on Naess, but utilizes other environmental ethicists of a "deep ecology" persuasion or influence from the USA such as Regan, Devall, and Sessions, and Rolston (Kopnina, 2016, p. 139). Having spent her formative years growing up in the Soviet Union, Helen's "lived experience" as a subject of a dynamically changing socialist-nationalist politics, policies, economies, social structures and their "environmental" relations and consequences are not dissimilar to the State politic transitions in education, sustainability, and development highlighted in Stefan's Vietnam "case." Like other respondents, Helen's ecocentric critique and commitment to environmental or, more specifically, ecological justice focuses on the reductionism in ESD policy, and evident in Stefan's analysis, to the restrictive view of the term "environment" as a form of "shallow ecology" (p. 142). Other contributors to the SI are concerned about the way in which ESD policy limits the notion of environment to "environmental protection."

Kelly Teamey and Udi Mandel, like the previous respondents, address Stefan's invitation for "alternate" interpretations of ESD policy making (Teamey & Mandel, 2016, p. 151). In the transgressive and transnational mode Heila establishes and Tom/Lucie, Edgar and Helen contextualize in accordance with their respective inquiries, Kelly and Udi outline a deinstitutionalized and deprofessionalized methodological approach to research—a "visiting in/to inquiries of solidarity." Wisdom, often held in indigenous practices within and across "locales" of knowledge, represent "other" geo-cultural-epistemologically legitimated forms of knowledge. These active/lived sources of knowledge serve as counterpoint to the typically abstracted policy-making processes "from above" (for example, UN, or university) whose logic and enactment practices, typical of much official ESD prescription, do not so transparently "trickle down" to those whom they purport to serve (Teamey & Mandel, 2016, p. 161). Kelly and Udi's eighteen month "Enlivened Learning" journey of 2012–2014, and ongoing

experimental efforts to facilitate the international development of an “ecoversity” in “reimagining higher education,” makes serious claims on the potentially radical role of “translocal” globalizing ethnography (of sorts) in generating different insights into the “grass roots” practices of education, sustainability and development. Conceptual “help” in their response is provided through Santos’s subaltern “ecologies of knowledge” and, with Bengtsson, a methodologically enlivened Laclau and Mouffe. Kelly and Udi’s deinstitutionalized methodology, in conversation with the more “formal” academic efforts and insights into practices of education, environment and sustainability offered by our co contributors to this SI, collectively breathe life into how policy-making processes and deliberations in ESD, as well as abstracted prescriptions enactments and evaluations, need to be reworked and reimagined for value, experiential/practical insight, and efficacy in the sociocultural real (Teamey & Mandel, 2016, p. 159).

Stefan’s short rejoinder to the six preceding response articles is limited, by strategic necessity, to highlighting some of the gaps, or *aporias*, in this SI’s conversation. To achieve this, he identifies where convergences and/or consensus of thought appears to exist amongst the contributing authors/respondents. These aporias highlight a “politics of ontology” that, surely, invokes a politics of epistemology within that discursive construction of policy making and its consequences (Bengtsson, 2016, p. 163). Tactically, among a great deal Stefan might comment upon, he focuses reflexively on how “figures of reasoning” enable and constrain the critical discourses of EE and ESD and how, in turn, reconfigures of reasoning can “experimentally” be “played with” in advancing or extending the “constructive plurality” of the discourse of critical EE (p. 163). Stefan ‘samples’ two major concerns, and questions of agonism, he extracts from the collective narrative. The first is the political status of ethics (broadly understood) assumed, construed or discursively constructed as epistemologically foundational to critique/commentary. The “openness” valued by Stefan (and, indeed, by all other contributors) must grapple ethically and, therefore, politically with questions of how the presencing of absence might violently discourage other (moral) absences under the assumed or presumed solid “we” in critical EE and ESD, and respective critiques of policy making (p. 164). This particular figure of reasoning or, perhaps, invitation for “anomalous thought” in Jickling’s (2016, p. 135) terms and Lotz-Sisitka’s “reversal thinking” (2016, p. 98) pervades Bengtsson’s second concern about the geo-cultural-epistemological and temporal/historical nature of critical environmental education and its research. Targeted by all conversation partners in this SI is the (modern) cartesian (liberal) universalist tendency (standardized and instrumentalized) for a *telos* (performatively fixed/static end/outcome) of policy making that unless unchecked will silently deconfigure or invisibly erase the geo-cultural-epistemological (social and ecological) heterogeneity implied historically and pluralistically in critical EE and EER discourses.

Finally, based on the preceding critical reactions, Phillip Payne outlines a “post-critical” approach to inquiry in EE and ESD. Its underlying “morphology” is not only applicable to continuing the needed, not tired, vibrant conversation about policy and its vital making in ESD (Payne, 2016, p. 169), but also to the related “makings” in EE and ESD of curriculum, pedagogy, and research (p. 171). His post-critical “materialisms” embrace aspects of the various movements in (Western) *thought* (p. 176). These “new turns” invite the *outside* a “non-anthropocentric” ontology~epistemology~methodology of the human and non-human (and culture and nature) to the *inside* “ecobecomings” of post-critical inquiry, discourse, and praxis in EE and EER (p. 176).

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