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RESEARCH ARTICLE



“Amnesia of the moment” in environmental education

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ABSTRACT

Northern theories like “new materialism” and “posthumanism” are, increasingly, influential in the global productions of knowledge in environmental education (EE). In this latest discursive phase of textualising EE, the conceptual mash of “new/post” idea(lism)s is easily identified, but not critically examined, as is undertaken here via three interrelated critical case studies of key idea(l)s in the new/post. Criticism of the current normative, theoretical, methodological, and empirical mess of environmental education research (EER) must be understood within three historical and structural problems, namely; (i) the formative stages of modern EE in the 1970s, (ii) the escalating importance of theory in the 1990s transition from modern thought to postmodern thinking, (iii) the neo-liberalization of academic identity formations and post-intellectual relations in the audit culture of the corporate university of the 2000s. The first two closely related case studies of the new/post highlight the ahistorical and atheoretical mash of performative-ly-driven abstract theorizing in EE. Each demonstrates how earlier “founding” policy of EE, its implied pedagogical praxis, and commensurable methodological development in EER have been forgotten. The first critique focusses historically on the allegedly new idea of “agential relations” and its confused discursive claims about “action”. Forgotten is the vital matter of “ecology” and its relational “things”. The second rescues the ecofeminist notion of “embodied materialism”. Ecofeminist praxis has been *deactivated* by the new/post *abstraction* of feminist poststructural knowledge claims on “material-discursive practices”. Together, these interrelated critiques retrieve a much needed historical-critical-material frame from which new/post textualism can be conceptually reconstructed and empirically qualified in ways that *reactivate* the ecopolitical rationale for founding EE. If, indeed, theory is needed in ecopedagogical praxis, an alternative case exists for “bringing theory back in” via, for example, ecophenomenology, ecological anthropology, and eco-humanism. Ecopedagogical practices and their research might then (re)“turn” to a realist ontology via, for example, the “materialisms” of the “new” of “speculative realism” coupled with the “old” (sic) of “critical realism” in, strangely, “post post” claims on knowledge production. At issue in de-abstracting, re-materializing, repoliticizing, and decentering the hubristic authority of theory in new/post EER are numerous axiological commitments, epistemological issues, and methodological dilemmas concerning the onto~ethics~politics of (mis)representation in the global North. Underpinning the two case critiques is a third “criticism” of the postmodern *means* (mediums/modes) of knowledge *production* (forms) as they “intersectionally” perform a digitally platformed and instrumental colonization of the global North and South discourse of EER. “Other”wise, in the post-intellectual climate change of a universalizing new/post technics of “agentialism,” we misrecognize who we are textually “becoming” and, in being so post-inscribed and newly-mediated, are *distracted* from what “really” practically matters in the field, and why it “materially” exists.

KEYWORDS

Criticism; praxis; posthumanism; new materialism; technics; material-discursive practices; ecopedagogy

Criticism¹ and new/post

This criticism of the increasingly authoritative, “post-intellectual” (e.g., Cooper, 2002) role of theory in environmental education discourse makes the case for an **ecologically-materialist-discursive praxis** in environmental education research (EER).

Allegedly “new” theories, or philosophies, in the Humanities and Social Sciences, such as “new materialism” and “posthumanism” (hereafter, new/post) are, increasingly, popular in global North EER texts. The following criticism of new/post theory is the final in a trilogy (Payne, 2018a, 2019a) that develops “a critical theory of theory” for environmental education (EE) discourse. Modern (historical materialist-realist) criticism, debate, contestation, and praxis in EE, such as the ideological critique of the “socially-critical” approach (e.g., Robottom, 1987; Fien, 1993), and the ecological “critical ontology” for inquiry (Payne, 1997, 1999), including EER (Robottom & Hart, 1993) have been muted and de-politicized by the populism of postmodern (linguistic, textual) deconstructionism, conversations, and imaginings.

My criticism of new/post EER prosecutes three interrelated debates in research praxis; (i) the prioritization of ontological matters and requirement for adequate methodological deliberation in *accessing* the phenomena under scrutiny and then *representing* that matter over/against the continued new/post authority and textual privileging of epistemological interests; effectively, in such rhetoric empirical insight and qualification of theory goes “missing”, (ii) how EER is named and, subsequently, positioned in the emergent global politics and dynamics of South-North knowledge productions, and (iii) the never discussed performative abstractionism of the material practices, embodied modes, and, now, “new media” forms of post-intellectual academic exchange, as that new/post instrumentalization of colonizing knowledge productions is, simultaneously, digitally-accelerated and imperially platformed (Payne, 2003/2006).

The first criticism (Payne, 2018b, 2018c) in the trilogy sought a historical return in EER to its praxis in EE. It reconstructively proposed a “reversal logic” in *empirically* and *conceptually* formulating a grounded “practice theory” of “ecopedagogy as/in scapes”. The *grounds up* experiment used an inductive logic to generate a practices-driven approach to theorizing EE. Real, material, bodied, experiential practices were viewed as the pivotal starting point and scaffold for empirically building, or qualifying, or contesting “given” (pedagogical) theory. Eschewed was starting with the latest celebrity theorist or his/her famous text, or limited to that which very generally explained a particular inductively-driven interpretation of ecologically educative experience. This reversal approach to theory building *in, about* and *for* EE is a significant point of departure from the academic orthodoxies of theory “trickle-down”; and/or uncritical rehearsal of sweeping generalizations and inventing of slogans; or/and barrage of insider jargon *about* EER (i.e., applied deductively, instrumentally, vaguely, opaquely, exclusively) to the practical grounds of ‘lived’ everyday EE pedagogy, curriculum, or policy.

(Meta)methodologically, this practice theory employed an *assemblage* of thirty odd empirical-conceptual studies conducted by eight contributing researchers from different parts of the globe (see also on assemblage metamethodology in EER, Payne, 2016). Together, the assemblage confirmed the importance to ecopedagogy as/in scapes of: the centrality of Nature *experience* and its various qualities in the enactment of EE in various embodied ~ timespaces; the physical importance of *movement* experiences in locally *scaped* derivations of Nature; the *intercorporeality* of beings and things in the flux of *encounters* with/in Nature’s scapes; the *affective* importance of such encounters in the various *scales* of Nature *scoped*; the *lived* imperative of *slowness* in ecopedagogical encounters; and the *ecophenomenological* deconstruction of the commodification, objectification, and instrumentalization of human and environment actions, interactions, and assumed *ethico-political* relations. The reversal experiment in assembling an *ecosomaesthetically ~ environmentally ethical ~ ecopolitically* experienced practice theory aimed, also, for a partial repairing and bridging of the chronic “theory-practice gap” in the persistent dualism of (abstract) EER and (grounded) EE (or mind-body, or rhetoric-reality, or textualism-lifeworld). These still silenced dualisms continue to hamper critical progress in the material intra/inter actions and relationships of EE and EER. The abstracted gap in EER, now reinscribed chasm in EE, continues to corrode the formative commitment in EE in the 1970s to a *critical praxis* in both EE and EER. Subsequently, over the embodied time ~ space of the “field”, that chasm has deepened and spread in the global North while simultaneously penetrating the global South via the post-intellectual instrumental reason of the

individually intensified fast digital downloads of new/post theory and their performatively-driven platforming.

The second criticism (Payne, 2019a) in the trilogy provided the historical background to the first. The primary purpose was to lay bare, and bear witness to the unacknowledged problem in EER, at the very least, and educational research (ER) more generally, of the rapidly changing form of academic “intellectual exchange” where the authority and autonomy of increasingly *abstract* “theory” (often commentary) dominates the new/post “mediated” *interactions* and *relations* of individualized academic performances, and institutional performativities. Its “history of the present” method of critiquing fifty years of knowledge productionism (and epistemological representationalism) in ER identified the early 1990s “post” modern rise of the linguistically-driven “turn” in EER as deeply problematic for the practices of EE, the valuing of Nature, and related concerns about environmental, ecological, and social (in)justices. That turn, first, inscribed and, second, legitimized the *textual* authority of what I identified as the rise of “performative abstractionism” in EER. This second study of the rise of theoretical abstraction, obfuscation, and distraction in ER and EER examined the *discursive* “flight” of *theory* “up” and “away” and/or to the “side” of the practices in EE envisaged in the genesis of the field in the 1970s (e.g., Palmer, 1998). The critique concluded with the identification of 17 problematic characteristics of textualized post-intellectual EER. Only a few are listed here so as to shed some light on the still invisible problem of performatively abstracted EE: over-use of big ideas, pseudo-radicalism, absence of social and structural criticism, over-generalization of an idea, non-representation of empirical insight, and depoliticization of critical scholarship as praxis. In short, the abstracted linguistic “games” and textual “spaces” newly created and “imagined” in the post of researcher-researched relations in such “post” EER “idealism” were and are, invariably, emptied of historical purpose, structural understanding, and practical meaning, or agential intent. Elsewhere in this Special Issue, writing from the global South, Carvalho, Steil, and Gonzaga (2020) are highly critical of the Northern prefixing of “post” because of its underlying assumption of a teleological worldview that, paradoxically, reconstitutes the dualism of modern thought and postmodern thinking. Post approaches to pedagogical, curriculum, policy, and research development now individualize and intensify a performative contradiction of a textual practice that is largely devoid of any “material” praxis in the everyday of the EE they/it theoretically and/or conceptually, and methodologically, purport to (epistemologically/textually) represent.

My second “extended essay” case critique of the 30 year-long escalation, intensification, and individualization of performative abstractionism in post approaches to EER also emphasized the unacknowledged problem of the structural-material authority and form of new/post-intellectual exchange and “embodied (academic) relations” in EER. This “turn” to post-intellectual discursive abstraction or, if you like, textually-driven only *intra* and *inter* actionality and *relationalities* of the (human) agents of EER discourse is, now, radically reconstituted and reassembled *within* the abstractly othered “digitalization” and “platforming” of knowledge productions. Put differently, real agents and actors are “lifted out” of their *in situ*, lived embodied relations in material time ~ space. This “faster turn” in an accelerating new/post global “technics” of EER, EE, ESD, ESE is demonstrated materially in, for example, the turn to journals and the on-line, on demand explosion of their annual numbers, conferences networked by electronic and “podded” connections and, even, mass universalized credentialism in the academy (i.e., MOOCS) catalyzed through neo-liberalisms’ performative “stealths” in and across the mobile and fluid academy. In EER, we remain “blind” to how faster technologies, their material designs, and, now, digitalizations in design serve to platform a “politics of the artefact”. The artefacts’ tools, things, and objects serve to “correct” and “normalize” (or renaturalize, in the case of Nature) an “invisible” (or nonrepresentational) moral (*intra*), ethical (*inter*), political (*action*), and ecological (*relational*) condition and “structure” – effectively an instrumentalized techno-ontology “rematerialized” in human and other-than-human dis/connections (Payne, 1997, 2003, 2003/2006). For example, at that material level of the technics of experience, the design and intra/inter/actions of a kayak, or vibram sole, or bicycle instrumentally “order” a pre-determining body ~ timespace relation with “inner”, “social”, and “outer” natures and their techno-ecologies that, in being revealed and represented, are available for environmental ethical deliberation and ecopolitical critique, including ecopedagogical reconstructive praxis. The fast “kayaker”, when compared with the slow “canoer”, is individually instrumentalized in consumptive

actions, techno-mediated interactions, and environmentally ethically dubious relations with the proximal river, its morphologies and water dynamics, and proximal surrounds. That kayaker is much “more-than” a kayaker in a kayak *moving* “on” the water and going “down” the river (Payne, 2003). The same with rockclimbing (Payne, 1994). Likewise, the preferred tool of the academics’ computer/laptop/smartphone/podcast (hardware and software) “screen’ culture medium and “post” form of experience instrumentalizes a form of abstracted and disembodied/disembedded/displaced intellectual exchange (intra/inter/actional) that “corrects” and normatively “reorders” (academic) knowledge productions (Payne, 2003/2006).

Following Braidotti, “posthuman” theory occupies a deeply ambivalent epistemological (and methodological) position in regard to the non-neutrality of technologies, a vexing question and festering problem that continues to be avoided in EER. Following Barad, new materialism theory in EER fails to acknowledge the ontology of, for example, the academic’s laptop or kayaker’s kayak, as a form of praxis (and, by osmotic inference, epistemology) of the “materialization” of “instrumental realism” theory (e.g., Ihde, 1983, 1991, 1993). For each and both, see Payne (2003/2006), and, for the purposes here, endnote 1.

The non-problematized abstracting turn to a “technics” of (many) accelerated, individualized, and intensified relations disclosed in this third critique of the trilogy also conveniently ignores “othered” material consequences, costs, and crises – the socio-economic “digital divide” inherent in the “accelerationism” of the “malign velocities” of capitalism (e.g., Noys, 2014) and the “Anthroscene’s” extractive “digital footprint” of toxicities “trashing” the earth’s crust (e.g., Parikka, 2015). New/post theorists in EER are resolutely silent on such “matters”, despite valorizing notions of “intra” and “inter” actions and “agential relations” that, elsewhere, have been well diagnosed historically and extensively critiqued in the “new media” of the North (e.g., Chun, Fisher, & Keenan, 2016).

Criticisms of this new/post media “rematerialization” of technocentric EER cannot be found despite repeated invitation (Payne, 2019b). Not surprisingly, following the first case critique (Payne, 2018c), none of the (positive) features, embodied qualities, grounded characteristics, and structural conditions of the practice theory of ecopedagogy as/in scapes assembled empirically (and conceptually) can be found, or demonstrated in the new/post embrace of, and silence about the technics of performatively abstracted global EER, as “post-intellectual” exchange and “relations”. For example, Ma Rhea (2018) Indigenist “deimperializing” of discourse technics and place pedagogy in EER makes an original contribution to advancing the “slow” ecopedagogy as/in scapes practices, including those postcolonial critiques and decolonizing strategies in EE whose *means of knowledge production* remain textually ensnared in the technics of new/post performative abstractionism. In this SI, Sund and Pashby (2020) use of Mignola’s account of “decoloniality” as “praxis” is a sophisticated, empirically supported critique of the “colonial matrices of power” whose eurocentrism lingers in the universalizing assumptions of posthuman theory in (Northern) educational and classroom research. Carvalho et al. (2020) also provide an empirically supported critique of the temporal (and spatial) and social assumptions of posthuman theory from within the urban South’s slower and traditional conceptions of the human and more-than-human cultural interactions and relations.

Moreover, as asserted in the second critique of knowledge productionism in EER (Payne, 2019a), the ever expanding new global (post-intellectual) “spaces” of “new” academic performativity are, indeed, vulnerable to more insidious, if not, overtly pernicious forms of (re)colonization and “occupation” via the various neo-liberal logics of theory and accelerated knowledge commodification trickle downs that underpin the various audit measures, hierarchical rankings, and levels of consumer/student product satisfaction in the post-intellectual academy. All impact, rate, and hierarchically rank the (global) performance, surveillance, and “promotional” prospects for researchers and their institutions. The nefarious uptake of such instrumentalized and commodified spaces occurs unevenly in these now emptied-out places (sic), not only in the digitally platformed and imperializing global North (Hall, 2016; Srnicek, 2017), but also in performatively colonizing and reoccupying, even reinhabiting the downloaded global South (Connell, 2007; Canaparo, 2009).

This final, third criticism in the trilogy, therefore, extends, sharpens, and re-contextualizes (conceptually only, here) the previous two. The critical theory of performative abstraction is used in the following two (only) illustrative case studies of the new/post amnesia of the moment in EER. I highlight the new/post idea(lism)s of (a) “agential relations” and (b) “(embodied) materialism”. The two critiques, somewhat

ironically, are “entangled”, or “intersecting” – key slogans popularly deployed by the vast majority of new/post textualists in EER. The less ironic, more serious historical-material reason for “connecting” the two expresses how the new/post discourse of EER is increasingly (i) *ahistorical* and (ii) *atheoretical*. Praxis is obtuse, at least, or gone “missing in intra/interaction”. That is, underpinning the two case critiques of knowledge production in new/post EER, the new/post performative abstractionism of the instrumental technocracy of EER mirrors the global symptom of the post-intellectual “amnesia of the moment” (Virilio, 2007/2010). Not coincidentally, Virilio’s *The university of disaster* account of time and temporality (and history) highlighted the *fastness of everything* in the dromospherical “post” of “modernity”. A fourth, closely related criticism of the materialization of fastness within the absence of temporal considerations and silence of criticism in EER can be found elsewhere (Payne, 2013, 2018d).

Interestingly, the new/post fast mood of EER coincides with the very recent acknowledgement of the Anthropocene. That also “new” term, it must be said, is contested ideologically and methodologically, or rivaled by alternative explanations of the environmental crisis (now “climate emergency”, for others “Nature emergency”) such as, for example, the Capitalocene, Novacene, Anthrobscene, or Chthulucene. Irrespective, for the historical purposes of reclaiming memory in EE, the “official” political diagnosis of an impending planetary crisis occurred fifty years ago in the 1960s, at least, in the North (e.g., Udall, 1963).² Udall’s *Quiet crisis* was part of the high profile political genesis of EE in the 1970s, via a series of United Nations conferences (Palmer, 1998). At that prescient time, EE aimed to be an “alternative”, if not **critical praxical** response to the complicity of mainstream education in that crisis. Now, new/post theory in EER informed by the acknowledgement of the Anthropocene, maybe Capitalocene, or other “(insert here)...cenes” is, at best, a “time lag” response or, at worst, a “memory loss” reaction to the anthropogenic causes and ongoing consequences of the old (sic) ecological crisis, now newly rebadged. While the name might be new, the longstanding crisis of **ecology** anchored existentially in our everyday “embodied materialism” and “agential relations” has only deepened. Thus, the enigmas of time and paradoxes of temporality and spatiality (or embodied timespace), and their dissonant materializations, are central issues in this critique of the “amnesia of the moment” in EER. Virilio’s “dromology” of speed, fastness, and their accelerations is, again, conceptually absent in most EER discourse, making this third entangled “memory-work” critique of new/post “material-discursive practices” well overdue.

In summary, this historicized, “memory-work” third critique of sampled idea(lism)s in new/post theory abstraction, textualism, and performativity addresses some only of the concepts included in the “Mindmap” framing of this SI (Rodrigues et al., 2020). Those concepts were traversed and mapped over four “slow” days of “face-to-face” discussion at the 15th Invitational Seminar on Research in Environmental Education held in 2018 in Stellenbosch, in the global South. Subsequently, the Mindmap that this criticism is indebted to was clarified iteratively by its participants over six months via 50 odd email exchanges. The now 25 year long series of Seminars remain committed to a slow research process of critical scholarship and intellectual exchange practised through the face-to-face of embodied intra/inter actions and agential relations. This SI is, therefore, one part only of a temporally and spatially “longer” public praxis, albeit in this last stage of “publication” by the very means of technics criticized above.

The wording of the Mindmap concepts focused on in this third case critique have evolved over the redrafting process, partially as a consequence of ongoing review from other contributors to the SI (Figure 1).

Politics of amnesia

Karen Barad’s (2007) “materialist” account of “quantum physics and the entanglement of matter and meaning” and Rosi Braidotti’s (2013) theorizing of “the posthuman” are, now, influential “must read” academic resources for many new/post researchers in EER.

Ignored is the historical-materialism of the “socially-critical” curriculum *theorizing* and critical pedagogy and practices of EE (e.g., Huckle, 1983, Robottom, 1987, Fien, 1993). Agency and action were key “matters”. Ignored is the historical-material informed “paradigmatic” debates of EER (e.g., Robottom & Hart, 1993, Lotz-Sisitka, Fien, & Ketlhoilwe, 2013). Action research and professional development were key matters. Ignored is one of the initial explorations of the “posthumanist dawn” of environmental

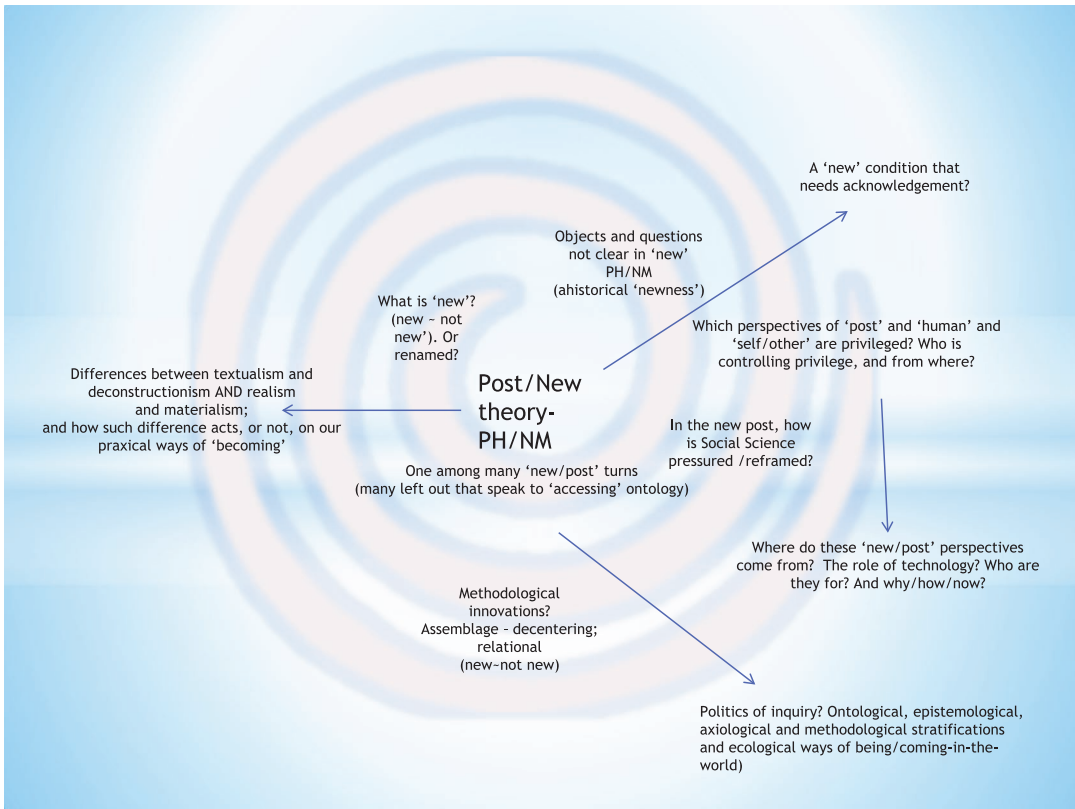


Figure 1. Conceptual critique of post/new theory.

education (Bonnett, 2004). Ignored is Bonnett's "tangled web" of the relations of environmental concern, notions of nature, the retreat from reality, including the primordiality of nature and its intrinsic value for knowing that "interacted" to mark out an environmental ethos for education that might sustain human flourishing and dwelling while retrieving Nature.

Meanwhile, Barad's and Braidotti's popular texts are *not* at issue in the following two case critiques. Indeed, each is interesting and important. Their uncritical uptake in globally North EE pedagogy, curriculum, policy, and research does, however, demand scrutiny if much **ecologically-critical-materialist** EE and EER have already been ignored, forgotten, and de-politicized of its praxis. For example, the intellectual, disciplinary, cultural, and pedagogical differences between each of Barad's and Braidotti's backgrounds and positioning in theory, research, and methodological approach has attracted little empirical interest, or critical concern.

The two illustrative cases target the ways researchers in EER use big ideas, like Barad's "agential realism", or Braidotti's version of "posthuman". I attempt to (re)materialize these ideals that, invariably, are "non"representative of the grounds, practices, empirical qualification, and methodological preferencing that typically occupies EER. Neither is an environmental educator. Nonetheless, their texts are frequently cited in EER, and some of their big ideas are privileged in texts, while others are not. Each idea, however, is ambiguous, or elusive, or even irrelevant in EE unless, of course, some "memory-work" is undertaken in EER to help that "re-materialization", representation, and legitimization. That reflexive challenge occurs in the following pages. More specifically in EER, the ahistorical interpretations, including misunderstandings, of already abstracted big ideas, and their conflation, is complicated further when the "flight up and away" of theory to abstraction and its textualism culminates in the even loftier floating signifier of "material-discursive practices". Of critical concern, therefore, is the advocacy for, and status of the new/post as those abstractions gain ascendancy and mobilize numerous performativities in the global North of EER, as described in this SI Introduction (Rodrigues et al., 2020).

Case 1: Agential relations as ecologies

The “relational” ontologies (and epistemologies) now advocated for in new/post EER under, for example, the notions of “post anthropocentrism” and “post nature” highlight diffuse ideas about agency and action of beings, objects, and things, including the categories of “humans” and “more-than-humans”, and “nature”, that “intra” and “inter” actively “matter”. Historically, however, in EE and EER, ecological theory, be it (i) the science of, or (ii) study of, including their “multi” or “inter” or “cross” disciplinarity, was a prevailing logic of knowledge interests, and important “agential” and “relational” praxis of those knowledge interests.

“Ecology” is *ontologically* being intrinsically active, interactive and relational of vital things and non-inert matter, and *epistemologically* (and methodologically) multi, inter, and cross disciplinary in knowledge generation and productions. Ecologies’ representations of the everyday materiality and materialism of agencies, actions, and relations is *not* new or post, in theory, and in practice, in either of EE and EER, or their intra/interactions. Until, of course, abstracted theory and its performative textualism hegemonically severs any “relationship” with the immanent, embodied, and intercorporeal practices that it purports to represent and legitimize. Moreover, “ecologies” are *actively* embodied in the ecopedagogies intrinsic to “experiential education” in EE that still remain under-researched in EER. Indeed, the many materialisms of agency and relations is a longstanding, embedded, and embodied (ontology, axiology) knowledge interest in the discourse-practice of EE (epistemology, pedagogy) and EER (methodology). This embodied ~ timespace “moving” ontology-epistemology interaction and relational tension anticipated by “ecology” historically constitutes the “material-discursive” “thing” called the “field”. Available histories of EE and EER choose to methodologically ignore this dynamic feature of the field’s historical ecologies.

Tracing key moments and movements in “thought” about the ecology/ies of that material-discursive praxis in EE warrants “memory-work” so as to historicize the critique of the new/post incorporated in the following two case studies. The old (sic) understandings and ecopedagogical practices in EE of “ecology” and “holism” are central knowledge production concerns for the following deconstruction and reconstruction of the ahistorical, atheoretical, and, so far, non-praxical of the “new/post”.

The modern *science* of ecology was founded in 1866 by the German biologist Ernst von Haeckel. He initiated the study of the “household of nature” where culture and nature were already acknowledged as “entangled”, as “intersecting” relations of different (human and other-than-human) agents, or things, that were not named as such then. The British botanist, Arthur Tansley coined the term “ecosystem” in 1935. His systemic approach focused the framing of problems and naming of inquiry on the various living and nonliving components of, and *interrelationships* of *everything*. In different ways, both of these modern notions were indebted to the classical Greek notion of *oikos*, or “household” (economy), where humans, adults, children, animals, plants, and species co-inhabited the “hold” in sustainable ways of individual being and collective dwelling. The effect of the *polis* (political citizenship, typically male) on the *oikos* was emphatic and created a range of vulnerabilities in the prevailing social relations, economic conditions, political actions, and ecological interactions of the household, particularly for the domesticated female (see, for example, Payne, 2009, 2010). This (brief) tracking of the linguistic, practical, and political “roots” of “eco” are incorporated into the second case critique, where Ariel Salleh’s ecofeminist, embodied materialism is recalled, socially and politically, in a counter critique of the new/post depoliticization of EER.

To be very sure, there are now numerous versions of the *science* of ecology within the natural sciences. They include molecular, organismic, population, community, and system. So too in the modern *study* of ecologies found in humanities, arts, and social sciences, including human, social, feminist, deep and, even, dark versions. The list of natural and social ecologies underpinning the multi, inter, cross and transdisciplinary aspiration of EE is, it must be said, never ending across the broad sphere of human-environment and culture-nature interactions as they range relationally through micro, meso, macro, global, and planetary “layered” scales of human and “other”-than-human relations; be it at the organismic level, plant level, animal, species... through to Gaian worldviews. This history of the “disciplinary” dynamic of the “field” is also ignored in “new/post” EER.

Academic specializations within this complex, *stratified* and dynamic ontology-epistemology-axiology-methodology spectrum and scales of the “field” ecologies of being and things are often, however,

(too) reliant upon the source discipline's disposition, be it quantum physics (Barad), chemistry, physiology, biology or geology in the natural sciences, or psychology, sociology, anthropology, geography, history, and philosophy in the social sciences and humanities (Braidotti). Indeed, Jane Bennett's (2010) *political ecology* (of vital materialism) is one of the very few ecologies that new/post theorists in EER actually reference or, indeed, review.³

Indeed, in "thinking theory" of a material-ecological type for EER, there are numerous human, social, historical, and cultural ecologies/*oikos* of far more immediate relevance, practical insight, pedagogical value, and everyday use in EE and EER. Historically, again, strong candidates are Leopold's ecological consciousness and "thinking like a mountain" (Leopold, 1949/1966),⁴ Bateson's ecological mind (Bateson, 1972, 1979), Matthews' ecological self (Matthews, 1991), Riker's ecological psyche (Riker, 1991), Ingold's ecological perception and movement (Ingold, 2000, 2011), Morton's ecological thought (Morton, 2010), amongst numerous environmental and relational/actional "thought" awaiting interpretation in EE and explanation in EER. But, yet again at the new/post preferred micro level of "embodied materialism" and meso level of "agential relations" in the environmentally problematic of everyday actions, intra/interactions of human and other-than-human, we need look no further historically than the de-centred but still "bodied" ecologies of, for example, nutrition and food (Lappe, 1971; Pollan, 2007), the spatiality (including temporalities) of households and their dynamics (Blunt & Dowling, 2006), the cultural ecologies of children's landscapes (Griffiths, 2013), environmental affordances of nature's rewilding (Greer, 2013; Mombiot, 2013), the action competence of learners in schools (Jensen & Schnack, 1997), the environmental design of various urban architectures (Skolimowski, 1981). And so on, all of which at the micro (or ecophenomenological) *levels* of agential relations and their embodied materialisms act and interact in a stratified ontology-epistemology-methodology. That materially embodied relationality reoccurs dynamically with meso, macro, global, and planetary *layers* of the historical structuration and everyday dynamic of human and other-than-human, and cultures-natures relations. For a "practice theory" of ecopedagogy example, in what ways do environmental matters exist individually, socially, and ecologically in a body/ies: and what are the pathways in and out of the body/ies do these matters take?" (Payne, 1997, 1999). These (in)visible empirically qualified ecopedagogical theorizations of the dynamically stratified everyday are ripe for investigation in EE because they are real to the agent and ontologically patterned into the material routines and habits of agentially embodied ~ timespace relations.

The above listing of theoretical, conceptual, and empirical ecologies barely scratches the surface of what already is historically available and relevant to EE and EER. Numerous "eco" examples of agencies, actions, relations, associations, and structures have already been well documented in EE. There are many "old" (sic) and rich intellectual (re)sources that, effectively, serve ecopedagogically at bodied sites of intercorporeal experiences and immanent encounters of human actions and interactions and other-than-human agential relations.

But, historically, again for the new/post moment. Thinking the present of the "field" is helped by tracing "other" history banks of anglo-speaking EE and "post" Rousseauian Northern European innovations in "early years" education. In 1969, in the first issue of *JEE*, the editor Clay Schoenfeld asked, "What's new about environmental education?" He replied to his own question with a political, ethical, and affective warrant for developing the "ecological" as a challenging concern, issue, or practical matter, along the lines outlined above:

The emotional overtones of yesterday's conservation literature are giving way to a more profound approach. There is developing "a scientific discipline concerned with the relationship of humanity to the total environment". "Environmental education presents conservation as a realistic, practical, and far-sighted public policy worthy of concern by an informed electorate". "Environmental conservation is the effort to do something about problems that arise out of conflict between man's need and capacity to engineer his environment for economic use, and the need and capacity of natural systems to adjust to the consequences" (Schoenfeld, 1969, p. 2).

In that same first issue, Gordon Harrison (1969) outlined an "ecological view" of EE from within the encroaching *industrialization* of natural systems. These historical, materialist, as well as emotional and political roots of EE indicated above go deeper, and outside North America. For example, originally published in 1922, J. Leach's *Australian Nature Studies* included an appendix "Nature study in education". "Nature study is a *process* [...] concerned with the common *things* and *events* of the child's environment

and that its *purpose* is achieved when such have a ‘*meaning*’ to the child (Leach, 1922/1963, p.497)” (*emphases, mine*). Complementing the formalizing of EE in the West via *JEE* and the UN conferences of the 1970s is the even longer historical development of “forest” and nature “schools” inspired largely by Rousseau’s classic *Emile*, a half “treatise” and half “novel” originally published in 1762. Rousseau’s “philosophy of education” gave rise to the “garden of children” concept of *kintergarten* practices attributed to Johann Pestalozzi and Friedrich Frobel, in particular, and developed in different parts of Northern Europe. Their controversial “new” pedagogical innovations cast children as “*active*” beings who “creatively” *interacted* with numerous things, often in *Nature*. Moreover, Frobel’s ecopedagogy “deconstructed” the then men only teacher rule of the time/place by asserting, controversially, that women were the “natural teachers” of young children (Allen, 2017). These historical roots of active agential, relational learning experiences in numerous outdoor environments, natural spaces, and urban gardens, underpin the equally important pedagogical and curriculum inspirations of EE found over the past 40 years in forest, nature, and bush schools that are readily apparent in the culturally, linguistically and ecologically “local” practices of *friluftsliv* (free-air life). To be sure, the cultural, political, and ecological variation of “nature” relational schooling will now need to incorporate its “objectification”, standardization, and commodifications in the neo-liberal post culture of early years education.

To broaden this historical narrative of how the *ecological field* represences, refines, and reconstructs itself as ecopedagogy that practically and empirically “add to the literature”, two “real” examples (only) of very well documented ecopedagogical praxis in the North are described so as to demonstrate the amnesia of the new/post moment. Each is a relatively *conservative* version of educational praxis and, to reiterate in the instance of EE, the material and contextual grounding and intercorporeal embodiments of the ecologies of *experiential learning*, following Dewey and others. The first example of the critique of the abstractness of the new/post preoccupation with “agential relations” serves as a scaffold to the second study of “embodied materialism” in the equally elusive new/post floating signifier in EER of “material-discursive practices”. In so doing, these two cases give pedagogical life (in educational theory, research praxis) to Barad’s quantum physics account of “agential realism”.

The first memory marker in Education discourse/praxis is the ecological “teaching” and environmental “learning” approaches developed in the late 1970s (in North America). These “pre” ecopedagogical practices focused “experientially” on children embodied and immersive, actional learning through play, fun, discovery, and adventure in and with nature (e.g., Cornell, 1979). In grounding the dense new/post idea of “agential relations” aimed for in teaching and learning in EE, here I highlight the centrality of “movement experience” pedagogies in relatively natural environments developed in that 1970s period by the well-known environmental activist educator, Steve van Matre. In his *Acclimatization* (van Matre, 1972) and *Acclimatizing* (van Matre, 1974), these moving, active, and interactive acclimations established the “hands on”, multi-sensory, feeling, and meaningful doing of “ecology in action”. The van Matre (1979) *Sunship Earth* (*SE*) program synthesized the two forms of acclimation into an outdoor/environmental experiential education program that, typically, occurred over five days of movement/actional experiences, usually in camp settings used by school districts in the U.S.A. van Matre’s *SE* has subsequently evolved into an (international) “Earth Education *Movement*” where culturally and ecologically sensitive, appropriate, and ethical variations have also been developed in schools and NGOs.

The main *SE* message was, and persists now,⁵ “we are all fellow passengers on a planet whirling through space, and we must understand and take care of life on our Sunship Earth. Many of man’s activities are tampering with the planet’s ‘automatic pilot’ mechanisms and threatening the smooth functioning of life on earth” (Payne, 1981; Ford & Payne, 1986). For the five days of the *SE* program, small groups of young children experienced the natural world through high energy, sensory, fun activities designed for maximum movement, action, and interaction in exploring and discovering seven otherwise abstract ecological concepts, namely; energy flow, cycles, diversity, community, interrelationships, and change and adaptation.

The extended *SE* ecopedagogical experience concluded with young learners, individually and in groups, reexamining how the *SE* experience could be “moved” into their everyday lives where they might keep the “sunship” in good order. Thus, *SE* envisaged or “imagined” some sort of ecopolitic and durable environmental ethic emerging from the learners/agents’ embodied materialism of an innovative EE program.

By contrast, the five-day “scientific” USFS program and PAWS pedagogy tackled its assumptions about “agential relations” differently. Its priority pedagogical activities focused on tree measurements for determining wood volume and class categorizations, plant identification, sensory awareness activities, measurement of plant community changes over time, investigations of the web of life, food chains, determinations of stream flow and temperature, and soil profiling. While still “experiential”, the cognitively oriented laboratory-like PAWS outdoor “doing” of various ecological concepts was more consistent with the scientific paradigm of student/learner knowledge acquisition and causatively assumed attitudinal change. This still dominant linear logic of expert knowledge transmission and presumed “correct” behavioral practice of EE, as validated in most programatically “evaluative” approaches to EER, persists in the U.S.A. and parts of Europe, Canada, and Australia, at least. It is, therefore, a competing and contradictory “history of the present” in EE/EER. The crucial point, however, is that even *within* these two contrasting experiential EE approaches, the dense and almost unintelligible notion of “agential relations” is pedagogically practised under competing, possibly contradictory, educative assumptions and disciplinary conceptions embedded programatically in the respective curriculum enactments. To be clear, the “material-discursive” signifier of “agential relations” floats, even in the most “grounded” and “embodied materialism” of EE interventions.

In summary, environmental educators like van Matre and Cornell embarked on a bold experiment in formulating for children an “un”disciplined, but experientially-conceptually rich, embodied, affective, active, interactive, and holistic approach to EE. Although pedagogically different to the PAWS program, both approaches promoted outdoor, experiential, agential and relational pedagogies in the nascent EE of forty years ago. These ecopedagogies and ecologies were flagged emphatically in the founding principles of EE (Palmer, 1998). Of particular importance in that EE policy were the 1978 Tbilisi recommendations; “... concerns the *inter-relationship* and *interconnectedness* between human and natural systems... views the environment in its *entirety* including social, political, economic, technological, moral, esthetic and spiritual aspects” (Palmer, 1998, pp. 10,11, *emphases* mine). And, preceding the Tbilisi policy was the prescient interest in the “multi” and “interdisciplinary” aspiration of that nascent **ecological** holism (e.g., Tanner, 1974). There remain many serious challenges for new/post EE researchers to explain the relevance, and demonstrate the value and utility of the new/post “agential relations” beyond its textual conversion to another floating slogan.

The second and closely related vantage point warranting additional memory-work in EER is the “action research” method/ology. It, too, was pioneered in EE in the 1970s and 1980s. This actively embodied methodological practice occurred in inquiry-based professional development for teachers (e.g., Robottom, 1987). It was later adopted in school-based EE and EER (Robottom & Hart, 1993) and is now commonly referred to as “*participatory* action research” (PAR). This active methodology emphasized the interactions of participating *co-researchers* and their relatively “common” agential relations in identifying, investigating, and resolving a local environmental problem and social issues relevant to that problem. In so doing, PAR promoted and practised a collaborative form of educational inquiry and democracy in action. The “action” emphasis was a significant break from the traditionally “centred” authority of the (expert/detached) researcher “objectively” administering, collecting, recording, and analyzing quantitative and/or qualitative data in the field (indoor/classroom and/or outdoor/nature) about the object of inquiry. PAR moved both EE and EER to the agential relations of the collaborative inquiry experienced in the field. Effectively, this second vantage point, although often anthropocentric, served to “de-center” the pedagogical and methodological individualisms that dominated in EE, such as the linear model of expert, classroom, teacher-led knowledge transmission, notwithstanding the PAWS “shift” to education outdoors. Put differently, PAR materially promoted the embodied agential relations of both the *subjects* and *objects* of inquiry in EE/EER. Post/new researchers in EER rarely cite the historical proponents, antecedents, and achievements of this “decentering” intra/interactive actional methodology. To be very sure, again, Barad’s and Braidotti’s theories are not materially embodied methodologies in EER, or ecopedagogies in EE.

In summary. The innovative SE curriculum and ecopedagogy, as well as the traditional PAWS program anticipated, and demonstrated, many of the central themes of new/post theory, such as the embodied materialism of agential relations, and notions of action, intra and inter action. So too did the PAR

methodology. On these two instances alone, there is compelling evidence of how the dialectic of EE and EER in the 1970s, 80s, and 90s anticipated the “material-discursive practices” now intoned in new/post EER discourse. These “practice theories” were already well-established in the holistically enacted praxis of the field, stretching well back to the 1970s, and before that to, for example, Schoenfeld, Leach, and many others, including the classical Greek *oikos*. Hence, the *ahistorical* amnesia of the moment whose problematic is well captured in the old wisdom of, “those who cannot remember the past are condemned to repeat it” (Santayana).

Consequently, the following, second case critique shifts focus to the *atheoretical* nature of *ahistorical* new/post EER. Again, for illustrative purposes, I memory-work Ariel Salleh’s agentially activist contributions to ecofeminism. Salleh’s selection emphasizes the entanglement of the above “cased” experiential ecopedagogies and PAR of “agential relations” within the following “casing” of the normatively committed “embodied materialism” of material-discursive practices in EE and EER.

Case 2: Embodied materialism and ecofeminism

The “post” prefixing of human in global North thought conjures the (sur)passing of the category of the “human” in education for sustainability (James, 2017). Or, humanity, humans, and our individual and collective humanism are now, apparently, rendered “surplus to requirements” (Hinkson, 2018). To push the case for a more nuanced understanding of humanisms beyond what much new/post theory negatively seeks to deconstruct or destroy, I re“turn” to the *embodied materialism* of *ecofeminism*. It is thoroughly human. The well-known Australian ecofeminist Ariel Salleh has published extensively since the early 1980s about the active *body*, and *activist* human. Her four-decade effort to bring ecofeminism’s individually and collectively productive body in nature to socially lived presence has occurred in a range of forums, including this journal (Salleh, 1989). By way of general introduction to Salleh’s corpus, ecofeminism is, “[...] exposure of the Woman/Nature objectification teach(es) us that feminist struggle and ecological struggle is one and the same politics” (Salleh, 1991, p.170).⁶

In order to expose the incomplete, almost incoherent, and contradictory prefixing of human with “post”, I focus primarily on Salleh’s version of “embodied materialism” as it is interpreted within her rebuttal of the *essentialism* of ecofeminism alleged by Northern postmodern-inspired liberal feminists and textualist deconstructionists in the 1980s and 90s. Salleh’s deeper post-Marxist concern was, and is, the political loss to women (and men) established by the “guilty as charged” verdict about essentialism – as that charge textually perpetuated the denial of (women’s biological/physiological) body(ies) lived and labored through the various bodies of Nature. Amongst many concerns, Salleh asserted the reductive allegations made against ecofeminism also did not account comparatively and historically-materially for a much wider range of oppressive cultural *structures* and exploitative socio-ecological *conditions* in which biological bodies live “intra-actively” and “inter-actively” as *agents*.

Salleh’s eco “socialist” feminism was a significant departure from the liberal feminism(s) that still dominate in the global North. Salleh’s project emphasized the need for collective agency/ies of resistance in different locations of bodied Labor and, even for the purposes here, associated knowledge productions of cultures, including the global South’s “third-world women”. Targetted in Salleh’s ecological and social critiques are those oppressive organizational features, institutions, structures, environments, ecologies, and associated disembodied histories of production, labor, consumption, and exploitation.⁷

Word limits prevent me from incorporating Salleh’s critiques of the operations of patriarchy, including the underlying assumptions of “deep ecology” (Salleh, 1984), and how that patriarchy plays out specifically in the “lived experience” of the “general” categories of class, race, and gender variations (Salleh, 1993). Salleh clearly anticipated how the new/post textual preoccupation with “intersections” might, indeed, oversimplify and reduce the categorical and historical “matter” of what does, and does not, “meet” or “converge” in those long, arduous, and different “struggles” that have occurred over the variable and different embodied timespaces of particular demographic circumstances, and geographical conditions. Those historical, cultural, and ecological differences and their “matters” cannot be conceptually conflated, textually abstracted, agentially simplified, performatively de/politicized, and normatively mis/represented at the “intersectional crash”, or its entangled mash, or simplistic constructivist polyvocal in the “now”.

Essentialisms in body(ies)/Nature in EER? In a recent two-part special issue (SI) of *JEE* devoted to “Gender Issues”, five of the 15 articles published included “ecofeminism” in the title. A number included it in the keywords. Seven of the (co)authors included accounts of their own private, or vocational, or public agency, be it personal reflections and communication with colleagues, professional pedagogical and curriculum revisions, or broader community activism. Those texts shed useful but limited and variable light on subjectivist notions of action, interaction, and relations. But it is a small sample only, reiterating the extremely rare “polyvocal” or/and “heterogenous” appearance of ecofeminist “voice” in EER over the past 20 odd years of “silence”. Curiously, none of the five articles on ecofeminism sampled in this Gender SI included “posthuman/ism” or “new materialism” in the article’s keywords. One author included a “posthuman” text in the reference list.

For the specific purposes of fleshing out and re”voicing” the “new” re”turn” of ecofeminism in EER via the contributions of Laura Piersol and Nora Timmerman (Piersol & Timmerman, 2017), and Tracey Rizzo (2018), in dialogue with Salleh’s earlier counter critiques, but also Di Chiro (1987), and Payne (1994, 1997) in EER,⁸ the charge of essentialism warrants scrutiny for several ethical and political reasons. That it: (i) may be “foundational” which many “post” de/constructivists textually abhor; (ii) emphasizes the organicism of biological and physiological “body/ies” and, in so doing, may reconstitute a series of dualisms that most “posts” also try to textually negate; (iii) epistemologically privileges the “post” (re)”turn” to ontology which it suddenly advocates for, but may conceptually misinterpret, deconstructively misunderstand, or textually misrepresent; (iv) discursively “pluralizes” and abstracts ecofeminism well beyond its ontologically-epistemologically oriented versions of embodied materialism and embeddedness in Nature.

North Americans, Piersol and Timmerman (2017) cite Salleh’s (1997) *Ecofeminism as politics*, but not her counter critiques of essentialism. They acknowledge the earlier critique of essentialism has an ongoing divisive effect on contemporary ecofeminism. They also acknowledge various interpretations of ecofeminism. They do not examine the pluralism of the term along “political theory” lines of, for example, liberal, Marxist, radical, and socialist (e.g., Warren, 1987) or, more recently, conservative, post-Marxist, critical, or ecophenomenological, amongst other variations of the way the term ecofeminism has been deployed discursively (e.g., Hay, 2002). Piersol and Timmerman’s liberal ecofeminism is concerned about dualistic *thinking* (*emphasis mine*) within various (Western) cultural norms and power structures that, they believe, serves to obstruct ecological and social justice. In rationally “reimagining” and “reorienting” EE, they assert, “this is important to avoid repeating mistakes of the past”. Their review of the literature identified a number of the critiques of essentialism, namely: (i) no universal experience of femininity, of woman, of woman in relation to nature; (ii) generalized definitions of the feminine that homogenize women in, often, biologically innate and/or reductive ways that “fix” gender; (iii) women are inherently and biologically more in affinity with nature than men. Piersol and Timmerman choose not to name the (alleged) essentialist “culprits”. They then point to how the critique of essentialism lingers in two main ways. Ecofeminism is stereotyped and essentialized itself. Second, the anti-essentialist trope perpetuates a fear in contemporaries where dualism, hierarchies, *silencing*, *policing*, and *exclusion* are, apparently, (re)occurring (*emphases mine*). Examples are not offered. But, if so, these claims are deeply disturbing.

On an optimistic note for non-essentialist ecofeminism, Piersol and Timmerman suggest the recent (ontological) interest in the “more-than-human” theory may assist in *thinking* beyond still anthropocentric feminisms. In this special issue, Carvalho et al. (2020) examine in empirical and conceptual detail the otherwise floating signifier of “more-than-human”. Piersol and Timmerman believe that signifier might serve as a key “theoretical” contributor to the “continual reflexivity” they feel will advance EE and EER. There is no empirical support and/or methodological insight. There is, too, no “theoretical” discussion about related signifiers like “non-human” and “other-than-human” or “animal”, all of which have been used in EER texts, invariably in an interchangeable manner with “more-than-human”. Richard Grusin’s (2015) edited “new” *Nonhuman turn* is, for example, not included anywhere in the Gender SI. Piersol and Timmerman conclude with a narrative of their personal *thinking* about the “lived experience” of their role as an ecofeminist academic. In sharing subjectivity, they seek to “reimagine” an ecopolitic, while moving beyond the allegation of essentialism. Some indicators of agency, and its relations, are included, but touched upon lightly in terms of a *social* ecofeminist praxis or activism.

Tracey Rizzo's (2018) social ecofeminist activism contrasts significantly with Piersol and Timmerman's liberal ecofeminism. Rizzo's activism extended over a ten-year period of university teaching while engaging in various public/local activist causes. Although North American Rizzo does not reference the Indian Gayatri Spivak's (1993) feminist postcolonial "strategic essentialism", it is a key ingredient of her mothered and professional "dance" in and out of essentialism, and practical confrontation with the "public" binary created in and through de/constructivist subjectivist discourse. Rizzo finds a way into the *duality* of agency and structure, a long-time "stratified (ontology, epistemology, methodology)" concern of sociologists and social theorists. As with Piersol and Timmerman, Rizzo locates essentialism in the argument of gendered identification with biology and associated universalization of women as, being, procreative and nurturing. Rizzo finds strategic essentialism is pedagogically challenging when its praxis moves from theory in the classroom to the practices her students also "experience" relationally with community partners. Rizzo's account of activism draws inspiration from Sturgeon's "essentialism" in "movement" contexts, such as the anti-militarist and anti-nuke testing protests.

Rizzo's "tango", in, with, for, and against strategic essentialism is suggestive of how research questions posed and probed in any "reimagined" EER might also need to dance with the *movements* and *moments* of embodied timespace actions and interactions. Links with the first case study of *movement experiences* and their embodied relations in ecopedagogy can be made here. A key to Rizzo's ecofeminism is the self-confessed messiness of her own private dance, and public tango with her student's struggles with theory. Her conclusion is (un)timely for new/post EER, namely "[...] the embrace of movement - and moment-specific essentialisms" (Rizzo, 2018, p.298). *Walking in/with nature*, illustrated above, is one of many ontologically *prior* or biological, geological, geographical, cultural, and ecologically foundational "movement experiences". *Movement*, or "ecomotricity" (Rodrigues, 2018) is a key (humanly, but also other-than-humanly) lived experience point of *access* to the ontology ~ epistemology ~ axiological ~ methodological politics of inquiry potentially assembled into EER metamethodology (Payne, 2018b). Walking in/with nature gives "de-centered" life and "non" essentialist, but praxical meaning in EER (e.g., Blades, 2019), be it ecofeminist or other, to the otherwise empty rehearsals in textualized EER of Baradian terms like intra and interaction, or connection, and embodied relations. Unlike Piersol and Timmerman, Rizzo proceeds with a lengthy narrative recollection of "lessons learned" over the many years of ecofeminist pedagogical praxis. To be sure, Rizzo makes no mention of posthumanism, new materialism, and "post" Nature theories.

The remaining versions of ecofeminism in the "Gender" special issue do not emphasize the question of essentialism in the same upfront way Piersol and Timmerman, and Rizzo do. North American Lloro-Bidart (2018a) turns from her earlier liberal "feminist posthumanist" ecopedagogy in/for/with animals-capes (Lloro-Bidart, 2018b) to a personal "ecofeminist" activism in a #MeToo type way against an incident of professional cyberbullying.⁹ The Australians, Palmer, White, and Woollorton (2018) poststructural liberal ecofeminist "critique without action is not enough" only outlines a preferred praxis for pursuing ecojustice in the neo-liberal academy.

The above politically variable samples of ecofeminist agencies, actions and interactions, relations, and, in Rizzo's agentially related praxical/ecopolitical case, share some broad affinities with, for example, Salleh's embodied materialism and collective ecopolitic. Salleh's "socially" embodied materialism potentially advances the critical praxis of EE and EER well beyond her early counter critique of essentialism in a number of important ways. They help flesh out this critique of the new/post performative abstractionism of "agential relations", and the still very generalized idealized interpretations and representations of various notions of (embodied) action beyond its (mind/subjectivist/constructivist) *thinking*, professional reflexivities, and academic textualism.

Salleh's "embodied materialism" is assertive in a number of other ways that warrant highlighting. First, her persistent post-Marxist emphasis on reconstructing the historical roots of modernity, and its patriarchal structures. Her praxis (practice *in* theory) enables the everyday ways through which collective agencies can *materially* "disrupt" (or phenomenologically deconstruct and/or existentially reconstruct) the actual practices of capitalism, the domination of the state on social and ecological interactions, and the masculinist values that perpetuate the oppression of those "other-than" or not masculine. Second, Salleh's embodied materialism "lives" the shared specificities of subjugation from which the collective

grounds of consciousness for change can proceed in a Freirean like manner. Her ecofeminist praxis is unlike the plurality of differences consistently privileged in the de/constructivisms of “post” theory. One likely consequence of the persistence of mere textualism of new/post is “sustaining” the structural roots of social, economic, classed, gendered, raced, and ecological oppressions, particularly in the global North, but, increasingly, in the global South.

Salleh (1991, p.163) was very clear, “An ecologically oriented feminism ... draws on the Woman/Nature theme ... and unpacks the complex and over-determined positioning of women along with nature in mythology and language ...”. Salleh is (methodologically) emphatic that a “politically localist” praxis of ecofeminism must incorporate specific, but overlapping accounts of cross-cultural variations in the gendered division of Labor, women’s work mediating nature and culture, and the impacts of women’s reproductive experience from a duly exposed Woman/Nature objectification. In promoting the purposes of ecofeminism in such a methodological manner, Salleh also anticipated the problem of “non-representation” in her equally compelling account of the “politics of representation” (Salleh, 1990).

Although I “memory-work” Salleh’s ecofeminism of the 1980s and early 1990s in emphasizing the historical basis of embodied materialism of Nature, her latest co-edited *Pluriverse* “...contains over 100 essays on transformative issues and alternatives to the currently dominant processes of globalized development, including its structural roots in modernity, capitalism, state domination, and masculinist values. This empirically-driven polyvocality offers a multitude of local critiques of mainstream solutions that “greenwash” development.” It (re)presents “radically different worldviews, as embodied and embedded practices, from around the world that point to an ecologically wise and socially just world” (Kothari, Salleh, Escobar, Demaria, & Acosta, 2019).

In short, “re”claiming Salleh’s ecofeminism in the new/post literature of EER highlights our bodies are all “of nature” whose status is precarious leading to a wide range of increasingly abstract, invisible or non-“presenced” historical, material, and symbolic subjugations and oppressions. Transforming our shared “selves” *through* relived and revitalized natures is in ecopedagogical order via collective movement experiences such as ecofeminist praxis and its agential actions and relations. And not “essentially”, as most deconstructive critics and poststructural theorists in environmental discourse and theory have erroneously alleged.

On this specific point, the new/post notion of “material-discursive practices” warrants keener attention in EER because it is yet another example of the performative abstraction flight of theory up, away, and to the sides (Payne, 2019a). Its discursive or textual meaning is, seemingly, self-evident in new/post EER, but whose praxis in EE remains unclear, mindful of the variable, politically and ethically dissonant “activisms” outlined above. In the same Gender SI, the Australian feminist poststructuralists Gough and Whitehouse (2018) surveyed some of the literature in ecofeminism and new materialisms. Despite their attempt to historicize the new of ecofeminism, they do so with reference to fairly recent (re)explorations of ecofeminism. This is helpful in partially elaborating the respective notions of “material” and “discursive” as now captured equivalently and non-dualistically in the otherwise abstract signifier of “material-discursive practices”. They did not include fellow Australians like Salleh, Di Chiro (now in U.S.A), and Payne in EE/EER. Val Plumwood is mentioned. Spivak isn’t. An extensive list of preferred “post” type theories and texts to read are recommended, with the theorizing and texts of Merchant, Haraway, and Alaimo prominent. Gough & Whitehouse’s selective theoretical attempt at historicizing the ecofeminist literature does reveal some of the conceptual underbellies of how the debate about, for example, essentialism might also be seen in the new/post light of the dualistic and/or intersectional tensions of the notion of “material-discursive practices”. However, discursively representing such (different and changing) “embodied” and “material” relations (or, for that matter, agencies or interactions, or movements and moments) remains opaque in their text. Some personal “ecofeminist” examples of embodiment are included within their historical commitment to feminist poststructuralism and the broader imperative to deconstruct the historical grip of patriarchy. Otherwise, the numerous postmodern structures and their embodiments perpetuating patriarchy, particularly in education, remain largely invisible and unacknowledged, including their very general concluding recommendations for EER.

The seeming textual and conceptual mash of “material-discursive practices” in Gough and Whitehouse (2018) is an example of how the ahistorical treatment of ecofeminism in EE is now being grafted into

the performative abstractionism of existing but highly generalized and rarely contextualized, or grounded, new/post theory in EER, and its postmodern modes and mediums of techno-mediated “post-intellectual” exchange and relations. We have to search elsewhere for a recent empirically qualified example of an educationally everyday materialist-discursive practice. It can be found Whitehouse’s (2018) *moving*, intense, watered, snorkeling *experience* and *momentary* encounter with reef ecocide. Whitehouse’s (repeat embodied ~ timespace) immersive experiences achieves (textually) the de-abstraction, embodied and “re”materialization of her ecopedagogy as/in an oceanscape. Her watered/grounded, inductive logic demonstrates the potential for the empirical-conceptual qualification of a “practice theory of ecopedagogy” in EER (Payne, 2018a). More broadly, that type of first-person, autoethnographically inspired narrative contributes to, for example, the speculative empiricism and realism “turn” currently ignored, or evaded, in the new/post performative abstractionism of EER. Strangely, Whitehouse’s “reef ecocide” is not co-presented in the Gough & Whitehouse account of ecofeminism and material-discursive practices. For a broader and stratified post-critical study of snorkeling, water, its beach setting, and coastal context, Nakagawa and Payne (2015) empirical study of ecopedagogy uses an ethnographic and phenomenological approach to interpreting and explaining immersive experiential learning *in situ*.

Put differently, when the habitual flight to authoritative theory in EER is mashed with undertheorized “new” notions of, for example, “material-discursive practices”, the chronic theory-practice gap in EE is reconstituted, yet again, as is a host of dualisms, including mind-body, textualist-materialist, idealist-realist, epistemology-ontology, male-female, culture-nature, and anthropocentrism-ecocentrism. This “values hierarchical-thought” in ecofeminism (Warren, 1994; Payne, 1994), at least, is to be avoided. To emphasize the (textual) representational problem of hierarchical-thought, and its consequential problem of dualistic thinking, Gough and Whitehouse (2018) account of “material-discursive practices” might better be represented as “flat” discursive-material textualism; a key ingredient of monistically and dualistically reconstituting the performative abstractionism of the flight to theory challenged practically and praxically in the trilogy of critique that introduced this third installment.

If critical praxis in a newly (re)configured “material-discursive practice” is to be enabled then those “embodied materialisms” entangled in their “agential relations” rooted uncomfortably in modern and postmodern oppressive structures demand “action”, not just more discourse and texts whose chronic theoretical flight up, away, and to the side is part of the problem of EER. In “bringing theory back in” (James, 2006) to, for example, ecopedagogical practice, as a contextualized and embodied version of ecological justice, examples of the persuasive if not powerful “historical-material” can be found in alternative theoretical approaches to be outlined below, such as ecophenomenology, ecological anthropology, and ecological humanism. Those “material-discursive practices” are far more conceptually and theoretically grounded, readily available in academic exchange, and practically relevant to EER.

Disentangling and unmashing the performative abstractionism of EER in, for example, the Gough and Whitehouse (2018) theory/text-driven mess, as disclosed in the second case critique and strongly informed by the first, has many demands (for example, Kessler, 2020). These include a serious substantive, real and methodological response to where in EER we see the best points of *access* (material, historical, and structural *as well as* symbolic, textual, and discursive) to the problematic phenomena demanding critical scrutiny. Hence, the first in the trilogy (Payne, 2018b, 2018c) whose reversal experiment inductively and abductively assembled a practice theory of ecopedagogy as/in scapes. To reiterate, it located various practices of EE and EER experientially on the embodied-conceptual (body-in-mind or, preferably, mind-in-body) specificities, movements, moments, encounters, and episodes of what really matters in EE *for* EER *before* their representation, and non-representation, and misrepresentation of the historical problem or contemporary phenomenon demanding scrutiny. Its metamethodological assemblage avoided theory, for the most part, and eschewed its privileging in the abstractionism of discourse and performativities of textualism. The second in the trilogy clarified the rationale for a nascent “critical theory of theory” in EER (Payne, 2019a).

In short, at stake, practically and theoretically, in this third critique in the trilogy is the epistemological (and methodological) trend, or academic fashion, of merely rehearsing slogans and jargon in “preferred” new/post theory that “advances” (idealistically) and “spreads” (imaginatively/textually) a popularized discourse in global North EE/EER about the relevance of that new/post. The substantive educational

problems of what “matters” in Nature, environments, and our human “actions” and “agential” relations with and against “other-than-human” over embodied ~ timespace encounters and episodes is subordinated to the performativities of the text and the seductions of abstract theory as reconstituting the post discourse of the once grounded field. In so doing, we (mis)understand how and why, and where and when, we in EER ecologically, actively, and interactively *access* the ontology ~ epistemology ~ axiology ~ methodology dynamic of the problems we, as researcher-researched, *actually* embody, materialize, enframe, and practice, even from within our sullied humanism.

Discourse abstractionism as regressive technique

In summary, the two preceding case critiques of the *ahistorical* and *atheoretical* amnesia of the new/post moment in EER dwell reconstructively on the methodological importance of “memorying” and *reconstructively* “restoring” the praxis of conceptions like agential relations and embodied materialism. Lessons in EE from the 1970s do need to be re-learned about, for example, the early ecological practices of ecopedagogies advocated for, and employed practically. “Theoretical” lessons also need to be learned about the negative impact of the divisive de/constructivist charge of the essentialism of ecofeminism’s body/Nature actions and relations. De/reconstructing that allegation, be it in ecofeminist discourse or, more specifically, by attending to and *accessing* the *moving* biological and physiological dimensions of bodies, or/and Nature allows us to deliberate far more carefully about the underlying ontology ~ epistemology ~ axiology ~ methodology challenges that EER must confront.

Ironically, Karen Barad (2007, p.132) summarizes the critical and praxical purpose of this third study in the trilogy.

Language has been granted too much power. The linguistic turn, the semiotic turn [...] it seems that at every turn lately every “thing” – even materiality – is turned into a matter of language [...]. There is an important sense in which the only thing that doesn’t seem to matter anymore is matter.

And, Elizabeth Grosz’s (1994, 2004, 2017) scholarly corpus of an “onto-ethics” of *becoming* is helpful in elaborating “ontologically” the agential relations and embodied materialism praxis pursued above. Grosz’s (2017) latest burden is to outline the “entwinement” of the ethics of ontology “other” than through epistemologically-driven discursive constructions of ethics *outside* or *after* due deliberation about the ontological presuppositions underlying the “politics of inquiry”. Earlier, Grosz’s (2004, p.2) “untimely” contribution to everyday politics critiqued the dominance of “post” type inscriptive and constructivist discourses in the humanities and social sciences (see also in EER, Payne, 2013). Grosz asserted, “we have forgotten where we come from” as a “double forgetting” of the cosmological elements through which *all* living things are born and live *and* the “chain” of bodies through which we “become” a genealogical or maternal element. She also highlighted the powerful historical-structural “brute world of materiality” deeply embedded in the historical “conditions” in which contemporary bodies live, act, and interact – intractable socio-ecological conditions that make life precarious, accidental, contingent, expedient, striving, and dynamic, all materialisms that her book serves primarily as a “reminder”. A reminder to theorists of the social, the feminist, the political, the cultural, the ecological who, in her untimely manner, openly questions the “relations between subjectivity, politics, and culture”. Curiously, Grosz, another very well-known Australian philosopher, like Salleh, working in feminist theory, is rarely cited in poststructural, and now “new/post” EER discourse.

Theorists [...] need to have a more nuanced, intricate account of the body’s immersion and participation in the world if they are to develop political strategies to transform [...] what is in the *nature* of bodies [...] the concepts of nature, matter, and life [...]” (Grosz, 2004, p.2).

Grosz’s “new new” onto-ethics as politics is resolute in its genealogical pursuit of the (pre)ethical (and intrinsically political) emergent, or *becoming*, of the *relations* of the ontologically oriented materialism of the *corporeal* body and *intercorporeality* or “ecologies of things”, reiterating the first EE case critique above. Her onto-ethic-politic stands as a sophisticated contribution to, and critique of, on one mind, the excessively idealist discourses and, on the other hand, the essentialized reduction of the (female) body to biology, or

static matter, as erroneously alleged against early ecofeminist thought, as revealed by Salleh through my second case critique. Any discourse is uneven and opaque, but becomes moreso when the abstracted texts discourse relies on are further abstracted, epistemologically and methodologically, far beyond the ontologically elemental and relationally embodied grounds they purport to represent. James (2006) stratified methodology is one of the few that lays out the “layerings” of inquiry and “levels” of appropriate analytical abstraction, starting with the grounded “empirical” and “moving” (recursively) to “conjunctural” and “integrational, concluding with the “categorical” of abstracted ecological-ontology relations.

Herein lies the broad relevance of (a) Barad’s and Grosz’s materialisms, incorporating Salleh’s embodiments, and the early ecopedagogical practices of an ecological approach to EE, to reconstructing the “other”wise empty abstractionism of new/post mashed “material-discursive practices” recommended for EER, and (b) a *stratified* response in inquiry to the “old” interrelated, deep (academic/intellectual and practical/pedagogical) problems of “correlationism” (e.g., Shaviro, 2014; Sparrow, 2014; Wolfendale, 2014), and “non-representation” (e.g., Thrift, 2008).

This “intersection” of historical problems in EER, also known as theory-practice gap, have different speculative routes and philosophical histories. They are touched upon below in introducing the relevance of “speculative realism” and the critique of the globally North of a new/post EER that assiduously avoids the other new of “speculative empiricism” as it is elaborated historically and materially by various other “eco” theories in phenomenology, anthropology, and the humanities.

Whither theory? Onto ~ ethics and politics of inquiry

“Bringing theory back in” (James, 2006) is important. But what “theory” is interpretively valuable, explanatorily incisive, and practically useful in a uniquely “less” anthropocentric and de-centred one like EE? What logic of inquiry, therefore, underpins and informs EER, reiterating the first in the trilogy of case critiques demonstrated the “reversal thinking” processes of inductive and abductive logics in generating “practice theory”? What can we make of the current “politics of inquiry”, or lack of, in EER? (Payne, 2018a, 2019a).

The *ahistorical, atheoretical, methodologically messy and non-praxical* mash of new/post theories in EER warrants serious attention, as demonstrated in the two preceding case critiques of the amnesia of the moment. Of central importance in challenging new/post framings of research is to raise the question about that theory’s discursive positioning within the well overdue politics of “post” and “beyond” approaches to inquiry. And, by implication, how those theoretical and discursive positionings simultaneously position the researcher – as both a subject and object of the research framing. History, again, tells us that such an earlier “politics” of inquiry was on strong display in EER in the 1980s and 90s, as benchmarked by the quantitative and qualitative, and “paradigms” debates (e.g., Robottom & Hart, 1993; Hart & Nolan, 1999). Narrative methods and “auto” studies helped us “read” and construct “stories”. Deconstructionist techniques of the late 1990s and 2000s drew attention to the “politics of texts” and their “inscriptions” of authors. But, within such representationalism, praxis beyond the author/subject went missing in action, as *inaction* within the *distraction* of a deductively driven “disruptive” textualism.

Meanwhile, as EER “post” fiddled with theoretical texts, the planet burns, climates destabilize, oceans heat, land desertifies, species become extinct, people die or rebel, and students strike. The questioning of the new/post EER posture in textually “re”materializing the subject/object of inquiry, critique, and research must deal axiologically, or normatively with how and, perhaps, why, when, and where the researcher-researched relation is *actually* an “access” point and (re)presents, with limitations announced, the embodied intra, inter, actional, agential, and relational natures of the subject-object of such inquiry. Ecophenomenology is particularly helpful. Then, methodological deliberation, even experimentation, and empirical qualification in the new/post of important concepts like “agential relations” and “embodied materialism” (in relation to the problem and purpose of inquiry) might proceed with some purpose, power, value and confidence, as has been historically remembered in the preceding case critiques.

This question of accessing a “new” onto-ethics-politics of inquiry (Payne, 2019a), or “critical ecological-ontology” *for* inquiry and critique, is a tall order, particularly when the shadows of performative

abstractionism of post-intellectual exchange intensifies and individualizes the praxical *inaction* and *distraction* of EER (e.g., Payne, 1999, 2006, 2013, 2018c). Following Grosz's "post post", praxical progress on an "onto-politics in the Anthropocene" is slow (Chandler, 2018). Chandler's context of critique is international relations. What, therefore, "other" intellectual resources, and theories are available, and can be "brought back in" quickly, beyond those historically memoried above?

Of course, within this "turn" to an onto ~ ethics ~ politics of inquiry flagged for a critical ecological-ontology in and of EER, any overdue empirical qualification, or methodological innovation and experimentation with "old" (sic) ideas like "ecology" and "ecofeminism", but, suddenly, new/post imaginations is also "entangled" with how equally abstract discourse markers like Barad's quantum "material-discursive practices" are *actually* and *instrumentally* reinterpreted, generalized, translated, and deployed in "humanly constructive" EER recommendations for historical-socio-ecological research. And "representatively" contextualized according to the historical, material and symbolic dimensions of the problem under study, as legitimized through the "best fit" for purpose in methodological deliberation. It is difficult to find any of the latter "coherence" or "commensurability" of the purposes, means, and ends-in-view of performatively abstracted and textualized new/post EER. Researchers in EE should, therefore, resist the fast seduction and reduction of grafting important and isolated concepts like "agential relations" and "embodied materialism" into the discursive new/post mash of posthuman theory, new materialism theory, and poststructural deconstructive positioning. Indeed, the two preceding case critiques highlight the often incoherent *ahistorical*, *atheoretical*, and *methodological* "mangle" of much new/post Northern textualism. This mash "floats" into the global politics of knowledge production in EER and its "newly" dominant (plat)forms and digitalized modes/mediums of intellectual technique and its exchange. How, then, can EER respond constructively and productively to that which is currently lacking in the new field, reiterating how the new/post fails to engage "other" post-Anthropocene developments and "movements in and of thought"?

In this final *critique* in the trilogy (Payne, 2018b, 2018c, 2019a), I dwell "theoretically" and "conceptually" on, primarily, the *atheoretical* construction of the new/post performative abstractionism in EER. I seek some coherence amongst the incoherence, even contradictions, and absences or gaps in the mash of new/post EER. In seeking to empirically *access* the politics of the ontology ~ axiology ~ epistemology ~ methodology "tensions" in inquiry, following Barad and Grosz, *for those inclined to theory*, I venture into the ignored "other" in EER of the also "new" of "speculative realism", mindful of its variant of speculative empiricism. For the purposes here, this historicist-materialist approach to empiricism within the duly acknowledged "politics of inquiry" draws on already available "eco" intellectual resources grounded historically, materially and symbolically in the everyday of the environmental and Nature problematic in EER (Payne, 2016).

Those theoretical resources "back in" EER include ecophenomenology, ecological anthropology, and ecological humanism.¹⁰ The first two "theories" abductively build directly, not abstractly, on the two case critiques. They add layers of interpretation, understanding, and explanation in "building" theory already "generated" at the embodied grounds and material relations of the subject/object problematic under scrutiny. They also enliven and animate the aspiration of textualized new/post of EE discourse abstractionism, including variations in ecopedagogical intervention and methodological experimentation. The third intellectual resource, ecological humanism, remains conceptually abstract, but is reflexively and historically well positioned to help frame inquiry and critique in EER. Ecohumanism may assist in clarifying the interrelated problem, and challenge for (re)framing the new/post EER. My general aim in incorporating these perspectives is to further develop the grounded and lived argument for "practice theory" in EE and EER in ways that enjoin and re-assemble empirical evidence and insight, selectively and astutely "bring theory back in" and, consequently, inform if not shape speculative thinking and theorizing.

Some basic propositions about new/post EER:

- (i) First, new/post mashing in its *atheoretical* guise refuses to acknowledge variations *internal* to the respective theories of posthumanism and new materialism. Numerous conceptual and normative differences within each of those perspectives are obfuscated or ignored. Then, the internal mashing and conflating of the two legitimizes the performative "escape" of theory to the abstractions of "up,

away, and to the sides” of EE and EER. For example, about 15 years ago, Braidotti (2006) acknowledged three strands of posthuman theory, including her own “anti-humanism”, from which additions and revisions have subsequently occurred in her later works, and from other critics. In addition, there historically (and geographically/culturally) are numerous versions of “humanism” whose relativities, comparisons, and contrasts escape practical differentiation from within new/post Northern EER conceptualizations and textualizations and, in doing so, serve to potentially homogenize and colonize Southern EER.

- (ii) New/post theory in EER does not acknowledge criticisms of it from within educational research (e.g., Rekret, 2016, 2018, 2019) and EE (James, 2017).
- (iii) New/post theorists refuse to engage with other “new” (sic) Northern perspectives, such as the “speculative empiricism” and “speculative realism” readily found in the so-called “speculative turn” (Bryant, Srnicek, & Harman, 2011) with its “post” “linguistic” return to ontology.¹¹
- (iv) They also ignore the well-established “stratified” approaches to the politics of inquiry in social theory (James, 2006) and how that has been reinterpreted in EER (Nakagawa & Payne, 2018), but also that from Roy Bhaskar’s “critical realism” (and materialism) (e.g., Sayer, 2000). Avoided are long-standing critical realist commitments to the “duality of agency and structure” found conceptually, methodologically, and substantively in, for example, accounts of agential relations within a “stratified ontology-epistemology” approach to empirical-conceptual inquiry. In doing so, they ignore the potential for “layerings” of understandings engaged by, for example, critical realism and ecophenomenology, or ecoanthropology in EER (see, Payne, 1999; O’Donohue & Lotz-Sisitka, 2005; Lotz-Sisitka et al., 2013; Agbedahin & Lotz-Sisitka, 2019). Margaret Archer’s (2000) exhaustive critical realist development of a theory of (human) agency and actors within differentiated social structures and cultural histories is a prime example of how methodological development can proceed in an empirical direction beyond mere textualism and more abstractionism. Of note to the first case critique above about the importance of “practice theory” in EE, Archer argued extensively, amongst other things, for “the primacy of practice” and “the practical order as pivotal”. James (2006) “first” layer of empirical analysis is used descriptively to make “first order” descriptions and connections in factual research whose “basis” recursively informs the subsequent layers of conjunctural, integrational, and categorical analysis, interpretation, and explanation of an ecological-ontology ethic-politic in the postmodern “period”. For example, in WOOFling with its relevance to EER and EE (Nakagawa & Payne, 2018).
- (v) If “new” but still “othered” theory is to be included, “speculative materialism and realism” (Bryant et al., 2011) has philosophical merit, and can be engaged theoretically. Amongst variations in this “speculative turn” to ontologically oriented inquiry, prime “theory” candidates include Didier Debaise (2006/2017, 2015/2017), and Manuel Delanda (2006, 2016). Why? DeLanda’s version of assemblage theory deals emphatically with the stratified nature of social complexity. Metamethodologically, in EER it was invaluable in framing inquiry into a “practice theory” of ecopedagogy as/in scapes (Payne, 2018c). Debaise concentrates on theory that “intensifies experience” rather than abstracts it. Debaise (2006/2017, p.1) candidly observed, “The *concepts* we deploy, the abstractions we construct, our very modes of thought are no longer able to deepen or develop our experience of nature; they only obscure its meaning”.

The concepts we employ practically and empirically? This concern about research problem identification and setting, and subsequent “(re)framing” of inquiry and criticism goes directly to the nub of clarifying the conceptual relevance of numerous evidential insights drawn from “bringing theory back in” via, for example, ecophenomenology, ecological anthropology, and ecohumanism, at least. These three additional “philosophies” and their respective methodologies within the social sciences and humanities are outlined below. Each and all can be “layered” metamethodologically into the stratified ontology ~ epistemology ~ axiology ~ methodology “re”framing of an “onto-politics of empirical inquiry” in EER. Those three theories are inherently agential, actional, and relationally disposed eco”theorizations”.¹²

Prominent (contemporary) *ecophenomenologist* theories readily available in the global North include David Abram (1996, 2006, 2010), Ted Toadvine (2006, 2009) and a co-edited volume by Brown and

Toadvine (2003). For revealing debate within ecophenomenology between Abram and Toadvine about the underlying assumptions and “symbolisms” for the embodied reflexivity they recommend, Hatley, McLane, and Diehm (2006) co-edited account of *Interrogating Ethics* is a fascinating account of the convergences and divergences in how and why ecophenomenology is of significant relevance to practical ecopedagogical matters, inquiries, experiments, and developments in EER. Their debate is revealing in regard to the axiological access point I foregrounded earlier via Barad/Grosz, and Petersen, as it relates to ontology ~ axiology ~ epistemology ~ methodological dilemmas.

Practically for the pivotal purposes of EER, without referring to (Northern) Abram’s (1996) extensive anthropological study of shamans’ “super” naturalness he “found” in S. E. Asia, (Southern) Carvalho et al. (2020) empirical study of the otherwise floating signifier “more-than-human” focusses on New Age shamanist practices in Brazil. They found shamans used “power plants” as pedagogically connecting urban peoples’ “transcendence” or ecospirituality within Nature. Furthermore, strong “lived” affinities also exist between (Northern) ecophenomenology, ecological/cultural autoethnography (Griffiths, 2013) and environmental writing/journalism (Davidson, 1980/2012), including the old (sic) genre of “nature writing” (Dillard, 1974 Mombiot, 2013; Moor, 2016). In EE, David Jardine (1998) led the way in the North. In EE ecological teaching, Doerr (2004). In EER, see for example Payne (2013, 2018a).

Second, the changing conceptual and methodological nature of *ecological anthropology* is also of direct and immediate relevance for practitioners, theorists, and methodologists in EE and EER. The “what’s going on here?” logic and quest of ecoanthropology helps access and reveal those culturally lived, relationally sensitive, and historically dynamic understandings of temporally situated and spatially localized (traditional) practices. The insights emerging inductively and abductively from ecological anthropology might then inform “postcolonial” type ecopedagogical experiments, curriculum/program deliberation, and policy critique and development.

Only a few prominent contemporary “new” representatives of “material” eco-anthropological insight, evidence, and methodology are included: Harvey, Krohn-Hansen, and Nusted (2019) *Anthropos and the material*, De La Cadená’s (2015) *Ecologies of practice across Andean worlds*, Descola’s (2013) *The ecology of others*, Kohn’s (2013) *Anthropology beyond the human*, and the somewhat better known in the global North of Tim Ingold’s (2000, 2011) seminal contributions to “bringing anthropology to life.” When “read” with the ecophenomenological hermeneutic approach or “skinned” and “fleshed” attitude of, for example, Abram or Jay Griffiths (2013) “kith” of children, a “re-materialization” of EE and EER ecopedagogy is “more-than” possible. And, also eminently practical, if the new/post pursuit of a “post” claim on (less?) anthropocentric, anti (enlightenment) posthumanism is to be “more-than” repetitive talk about the rarely presented “othered”.

Bruce Pascoe’s (2014) *Dark Emu* provides compelling evidence for a reconsideration of the hunter-gatherer label for pre-colonial Aboriginal Australians. De La Cadená’s (2015) *earth beings* of the Andean *altiplano* is overtly political in its promotion of Indigeneity. Anna Tsing’s (2015) account of the historical mushroom (in Oregon’s Cascade mountains and national forests) is also persuasive at the “layered” level of insightful and stratified critique. When “assembled” *speculatively* with, for example, Kohn’s (2013) account of how forests think (following Leopold’s lived imagery of how mountains think), their co-representational *empirical* insights provide rich, fertile *speculative-empirical* grounds and bodies for, following Debaise (2015/2017), the re-formulation of *intensely experiential*, enlivened, vital, animated praxis and practices (and theorization) of, for example in EER, ecopedagogy as/in scapes (Payne, 2018b, 2018c).

Debaise’s approach to the speculative empiricism of “nature experience” *intensified* was inspired by A. N. Whitehead’s (1929) process philosophy. Whitehead’s compatriot John Dewey (1938/1988) in *Experience and Education* called for the “*framing* of an intelligent theory of experience, indeed philosophy of experience”. Otherwise, Dewey concluded, “we are at the mercy of every intellectual breeze that happens to blow along” (p. 31). Dewey is an acknowledged leader, even “founder”, of the interrelated fields of experiential learning and experiential education. That forgotten pedagogical approach in EER is central to the historical, interdisciplinary aspiration of holism in EE. Dewey is rarely cited in the new/post, after enjoying a renaissance in general educational theory and philosophy in the 1980s. Whitehead’s aims of (process) education are never cited, yet his philosophy of nature is enjoying renewed interest in the “speculative turn” of theory “othered” in new/post EER that takes seriously the movement in “thought” to ecological ontologies and object oriented things (e.g., Bryant, 2011; Shaviro, 2014).

Third in judiciously “bringing theory back in” are many of the contributions to the *ecological humanism* found in the arts and humanities. This form of environmental, ecological, and nature “representation”, or *ecopoeisis*, is another old history not engaged in the new/post of EER. In the global North, for “memory”, we find the likes of Thoreau, Emerson, Muir, Wordsworth, and Coleridge. Their (male) “romanticism” is, invariably, derided, despite the contemporary “turn” to the esthetic (e.g., Butler, 2015) found in much “post” theory. More recently, the literatures, and “imaginings” of, for example, environmental criticism (Buell, 2005) and ecocriticism (Garrard, 2004) have ecologically “re” humanized the enlightenment writings or classical humanisms targeted negatively by some anti-humanist post-humanists, such as Braidotti. Braidotti’s (2013) posthuman humanities finds no intellectual, affective, and historical space for the longstanding ecological humanisms just outlined. Stacey Alaimo (2010), another new/post favorite in EER, does (briefly) mention some of those listed above and below. Rather, Alaimo highlights the political “ecotopian” writings of the North American Meridel Le Sueur, amongst others.

Indeed, there are many other resources in the environmental humanities whose methodological approach to *ecopoeisis* covers vast literary and artistic terrain. Like ecophenomenology and ecological anthropology, the still largely invisible ecological humanities in EER is traceable to the old global North genre of nature writing. There are also numerous examples of nature writing in the South, including the well-known in the North Gabriel Garcia Marquez’s “magical realism,” but also the lesser known even in the South such as the Peruvian Jose Arguedas’ (1958/1978) *Deep River*. Arguedas combined anthropology and literary studies. His ethnographic inspired Spanish *ecopoeisis* grappled with reinterpreting in a non-colonizing way Quechuan nature “concepts” in narrating the Andean landscape.¹³ Nature writing, in South and North, as well as art, provides vast humanly conceptual *ecopoetical* “space” for judiciously reframing EER inquiry, criticism and methodological representation.

To illustrate, *Walking*, as “intense experience” of (embodied) “movement” in “relation” to (materialized) nature, or “ecomotricity” (Rodrigues, 2018), is one ontologically basic intra/interactive “moment”. Its “nature” of relational spatial practice, and temporal event such as “wandering” in a local park, or “bush-walking” along a stream, is a patterned practice of “encounters” in the movement of moments over different timespace, settings, scapes, ecological affordances, and repeat episodes. Put differently, the *ecopedagogies* of walking, doing, being, and becoming in various “real” environments in EE, and for EER inquiry, can be framed practically as an intercorporeal form of holistic, transdisciplinary, experiential learning, experiential education, and ecological methodology. There is a rapidly expanding literature on walking (in nature) already available in the ecological humanities/arts and social sciences.

Here, I identify only a few of the speculative-empirical “new” ontology of movement, moments, and encounters and their “intensive experience” (Debaise). The “walking” genre is well evidenced historically in the ramblings of Thoreau, Muir, Leopold, Lopez and other “romantics”, and demonstrates the “intensity” of human and other-than-human “experience”. Hence, “bringing back” ecophenomenology, like Abram’s body/earth animalism, Griffith’s wild elementalism, and in the ecological anthropology of Ingold’s wayfinding, and environmental anthropology of Patricia Townsend’s (2000) “pigs to policies”. Robyn Davidson’s book (1980/2012) and movie representation (2016) of *Tracks* lucidly captures the many encounters, positive and negative, in her 1700-mile camel and dog trek across the remote, dry/hot Australian desert. Rebecca Solnit’s (2000) *Getting lost* is a powerful account of “wandering” *wanderlust* as a history of the cultural and political experience of walking. Robert Moor’s (2016) *On trails* hiking of the Appalachian Trail describes in fine-grained detail how trails “beneath our feet” are formed and fade. Robert Macfarlane’s (2003) *Mountains of the mind* uses his “ecological adventuring” to describe how mountains are historically conceived, constructed, and, increasingly exploited and abused. That text, also, is now available as a documentary/movie.

Significantly, Sarah Pink’s (2009) pioneering “new” methodological development of *Doing sensory methodology* included walking as an embodied mode and medium of ethnographic research. She carefully considered many of the representational concerns of incorporating the previously “non” representational of the sensorium intra/interactions of the researcher-researched relation. More broadly, Theodor Schatzki’s (2010) “timespace of human activity” in performance, society, and history adds conceptually and theoretically to the empirical dimensions and possibilities of researching such bodied *activity*.

This limited sampling of the empirically persuasive contributions of embodied, grounded, materialized “practical theories” of ecophenomenology, ecological anthropology, and ecological humanities converge emphatically on an empirical-conceptual basis of, for example, ecopedagogies in different scapes. Speculative theorizations can then more reasonably be extracted, or drawn, or inferred from these intense “nature of walking in nature” experiences for EE and EER. Abstractionism and obfuscation in (i)–(iii) above is minimized, while the narrow performativity in new/post inquiry and representation of abstractionism is resisted, disrupted, deinscribed, recast, and reframed.

In “bringing back” these “eco” empirical contributions of phenomenology, anthropology and humanism to a speculative empiricism and realism of intensifying nature experience and promoting of agential relations in nature’s varied environments and scapes, there is significant merit and potential in moving “beyond” the ahistorical and atheoretical new/post EER. It must, however, be acknowledged that “within” the “onto-ethics-politics” of inquiry “newly” demanded in “post” EER that the ecopolitical and praxical implications are, often, unevenly “presenced” (in the texts).

Elsewhere “new” environmental *agencies* and *activism* literature is, indeed, making a belated re/turn to EER **ecological praxis**. In a special issue of the *Canadian Journal of Environmental Education* (CJEE), coeditors Lowan-Trudeau & Niblett, (2017) posed the intriguing question of “What counts as activism?”. In the remainder of that volume, different insights and useful examples are provided. However, in the cause of “theory building”, five critical observations are posed about what (historically) counts as activism and action in EE, and in EER, as represented, or not, in that special issue.

First, Thomas Tanner’s (1980) classic study of the significant life experiences (SLE) of environmental activists is not acknowledged. Nor is another journal Special Issue guest edited by Tanner in 1998 (Tanner, 1998). It was dedicated to the history, theory, commentary, and (then) new research about SLE in EE. Nor is another Special Issue (Scott, 1999) dedicated to critical commentaries about SLE research in EE. Second, the vast “action competence” literature in EER escapes scrutiny (e.g., Jensen & Schnack, 1997; Jensen, Scnack, & Simovska, 2000). Third, (participatory) action research as an activist methodology in EER is only alluded to. Fourth, in the *CJEE* SI, new/post theories are, interestingly, not used, or referenced by any of the contributing authors. Fifth, the activism and praxis of ecofeminism does not explicitly feature.

Global politics of misrepresentation

The notion of *performative abstractionism* (Payne, 2019a) depicts the ebbs and flows of theory “use” over the fifty years of EE. Its more recent *post-intellectual* development since the mid-1990s in the neo-liberal acceleration of the instrumental technics (Ihde, 1991) of the means of knowledge production in EER critically identifies how, where, and partially clarifies why certain theories, ideas, perspectives, or approaches gain discursive and textual traction; become one dimensional and monological in explaining the “lifeworld”; tend to conflate or totalize the subject/object; and jargonistically exert power and control as an inscribing force in the global North while colonizing “its” many others, including the South. Other highly relevant theories “brought back in”, as outlined above, reveal different interdisciplinary vantage points and empirical insights that have been ignored or evaded in strategically advancing the *raison d’être* of EE in the 1970s. “Old” (sic) versions of EE and EER concerned with the socio-ecological relations of the actional, activist/praxical of change, or transformation, are forgotten. This amnesia of the moment in EER is demonstrated conceptually and practically in the respective but overlapping case critiques of agential relations and embodied materialism.

My trilogy of critiques of new/post theory in EE and EER highlight the increasing performativities and agencies of abstractionism that, effectively, serve to *dehistoricize* understanding of the field, *atheoretically* deconstruct its purposes, and *depoliticize* the historical-material structures in which embodied agents live, act, interact and relate, as that “post” of structuralism was embraced linguistically in the 1990s, and its new/post textualism as discourse has intensified digitally over the past five years. Abstraction is, simply, the persistent flight and chronic escape of theory up, away and to the sides of the bodied grounds and relational territories of critical-material praxis (Payne, 2019a). There, I argued, following

Clifford Geertz, “others” are left to clean up the mess/mash created by uncritically treating “new” theory, including its “relations” with praxis.

The basic purpose of the trilogy critique of new/post theory in EER is to reverse our “thinking” (only) in EER. New/post theory acolytes concerned with intra, inter and “ecological” relations of praxis might pause for a moment, slow down, and engage, at least, even textually with the field’s history, purposes, achievements, aspirations, and literature base. The two illustrative case critiques ground that reason.

In so doing, to recontextualize the new/post textualism of EER discourse, I have also taken the unusual step in this trilogy of making visible the chronic absence of any account of the “post” forms of the means of production and intellectual exchange, and mediated modes of social relations in the field. These abstracted means are now digitally dominant in (*re*)*onstituting* the platforming *conditions* of the global production and, probably, the universalization of Northern knowledge in EER. My preference for the expression *performative abstractionism* denotes the “end game” of the unbridled authority of the fast new/post flight, masquerade, or (e)scape of theory into the empty virtual “space” of the once material, agential, actional grounds of EE it misrepresents ontologically and, even in abstraction, lacks epistemological and methodological “correspondence”.

New/post theories are not theories of EE. Nor are they methodologies of EER. Nor are they policies for ecologically sustainable education. Nor are they ecopedagogical or ecofeminist praxes. Nor are they a view of globalized citizenship. They might provide a “view” of the self and the world. They are abstractions and, perhaps, symbolic *distractions* that float textually above EE. Parts of the new/post in thought *might* have some explanatory power or interpretive use in EE and EER. But that potential value, or use, needs to be justified within, for example, grounded and embodied accounts of ecopedagogical “matters” and relations, or empirically informed accounts of pressing, yet to be disclosed new/post research problems in EER whose scoping demands the new/post to do so. For example, in “what next for post-critical materialisms in EER”, I identified eight “major” absences and silences relevant to the quest for decolonizing of still Eurocentric/Western modernity (and postmodernity). Those eight absences were briefly listed, based upon an assemblage of research conducted by 9 researchers in policy politics in EER (Payne, 2016, p.170). Most of those eight “big ticket” items have been touched on here.

Or, from each preceding case critique example above, amongst other “evidence-based” conceptual-empirical possibilities, how will new/post EER describe, promote, and intensify insights, understandings, and embodied ~ timespace practices of the experience of nature, and nature of experience, and their ecopedagogical relations? (Payne, 2018b, 2018c). “Beyond” those two indicative case critiques, how might the new/post of EER theory act upon, interact with, and relate historically to the old (sic) empirically qualified understandings and insights of the significant life experience (SLE) and action competence theorizations of practices “memoried” above?

How dare we, therefore, not ask what schooling, educational, and life experiences, movements, moments, encounters and episodes were significant, or not, in experientially and existentially shaping the activism of Greta Thunberg and the agencies of her fellow student strikers, all around the planet? What, educationally, is the new/post insight to Thunberg’s advocacy to listen to the science our political leaders deny but, then, admonish strikers to attend school classes? Might “new” young children learn the “scientific method” (and other “literacies”) in school, and democratically make, and then take, responsible personal, public, and ecopolitical *action* as a consequence of slowly and *competently* investigating a local *human and other-than-human* problem? (Payne, 2015). Or the agential relations of “significant” others supporting the strikers, such as teachers and Principals? What methodologies with an ontological disposition are epistemologically available in new/post EER theory that *access* and represent the inter-generational ethics and politics of strikers’ (and non-strikers) families, homes, and their relations with the school, and intra/inter actions within it (Payne, 2010). And, drawing from Salleh’s longstanding global ecofeminist praxis, how might new/post theory in EER inform research into the various formative educational dimensions of the experiences, actions and relations of the Extinction Rebellion’s human and other-than-human interspecies movement? And so on. Can new/post theory in EER tell us anything of value or (eco)pedagogical use “educationally” about these, and many other examples of materially “othered” embodied praxes, and “responsible” decision-making relations, as anticipated in the 1970s

formalization of the field? Until then, the abstract flight up of the new/post amnesia of the moment represents no historical starting point in EE or/and EER.

Does it matter if performative abstractionism prevails in EER? Perhaps not! Posthuman and/or new materialisms theories might well provide a timely wake-up call for established educational researchers, or early career environmental education researchers “new” to the long understood ominous sources, governed processes, and material consequences of the Anthropocene/Capitalocene, or global heating, or climate disruption, or ocean acidification, or urban toxification, or food and water insecurity, or lack of intergenerational environmental ethics and ecopolitics, and so on. Or new and old waking up to the reproductive role of education and research in reconstituting those environmental and ecological problems. New/post theory might provide some different intellectual resources, even jargon and slogans, that sheds additional light on “old” practices in EE and EER “beyond” the two (indicative) detailed case critiques. And yes, new/post idea(lism)s and imaginations might be part of an overdue digital ring tone now needed to awaken educators and researchers from the anthropogenic somnambulism of the past fifty years and our pedagogical, research, and policy complicities in the ecological crisis. Education research has ignored EER and EE. That policy inspiration was the genesis of EE in the 1970s where its earlier initiatives in conservation education and nature studies highlighted the historical, structural, and materialist roots of an alternative education aimed then at *de* and *re*constructing education. The *conatively* oriented terms “conservation” or “preservation” is rarely used in contemporary educational discourse, even EER. Those terms were deconstructed and replaced in the 1990s by the much vaguer “sustainability” whose floating “emptiness” in EE discourse created the praxical “space” for conservative forces to (re) occupy and (re)inhabit a consumption and extractive approach to sustainability affluence, a “slow violence” to the poor (Nixon, 2011) largely devoid of ecological and social sustainabilities.

It matters a great deal in EE discourse, however, that any new/post in EER does not engage with its 50 year-long history. Lest it misrepresent, obfuscate, negate, or de(cons)truct that historical purposes and achievements of the field in different parts of the globe. Re-engagement with that history appears to be not occurring, as outlined in the above two case studies, when sampled (textually) in relation to the first two parts of the trilogy of critiques. It matters even more when the fast means of post-intellectual performative abstractionism of platformed “representations” and “legitimations” of knowledge production are introduced to the critique of the new/post. The case has been carefully outlined above to expose the hyper-productive and “impactful” performativities of “post” academic Labor in the “new” academy as they serve stealthily to s(t)imulate yet another “new” form of neo-liberal academic imperialism. If so, this “post-marxist” type critique on the global “*means*” (and hegemonic modes) of a technologically reconstituted academic knowledge productionism, as post-intellectual imperialism, demands a materially (and symbolically) revitalized critical praxis deeply mindful of technologies’ masquerading as a disenchanting nature (e.g., Feenberg, 1991; Ferkiss, 1993; Germaine, 1993). Otherwise, the new/post technicist modes, mediums, and means of knowledge performatively abstracted will, effectively, instrumentally, and textually, undermine those worthy local efforts in EER and EE to establish decolonizing pedagogies, methodologies, and policies.

For the *critical* and *praxical* purposes of this *JEE* SI, those two “entangled” or “intersecting” sleepwalks are already well-established in the new/post global North. They serve nightmarishly to reconstitute the pedagogical complicity of education theory, philosophy, research and curriculum in the ecological crisis that led to the formalization of EE in the 1970s. Now, the neo-liberal corporate, audit and performative postmodern university narrowly prescribes and inscribes new PhD candidatures, the faster identification of “new” research problems demanding innovative solutions, and quick outputs. It seems to matter a great deal in accelerating the processes and products of research ranking, as it promotionally does for supervisors, and early career environmental/sustainability education researchers, EE journal submissions, funding for EE conference and status of SIGS.

An “other” “untimely” intervention about the post-intellectual academic climate change is warranted, following the mention above of Grosz’s critique of the “post post” becoming. Eva Petersen’s (2016) critique of timely and untimely feminist (and masculinist) knowledge productions in education research is illustrative of the broader problem targeted in the second and third of my critiques in the trilogy. Petersen’s “cacaphonic” voicing of “academic scenes” is one of the very few (ethnographic and phenomenological)

studies that *accesses* and evocatively expresses the politically-loaded nature of “intra/inter-actional” and “agential” relations in the various professional and personal performances of educational researchers. Petersen’s courageous “critique” focusses on the performing of “subject(ivities)” expressed “politically” within the “cultures” of feminist knowledge productions, such as an academic’s office, eminent professor’s private meeting space, corridor collegial chats, and conference coffee lounge conversations. Petersen uses empirical data to “voice” us academics *in situ* as “beings in time” that, subsequently, reframe us, individually and collectively, as “temporal becomings.” Petersen’s “politics of inquiry” assertively and pragmatically addresses those mundane, material, academic “spaces” that, often, are excluded from “theorizing” the “nature” of academic work, including the post-intellectual abstractionism of practices I emphasize. She reveals, as did Jennifer Greene (2013) in her critique of the mash of feminist poststructural and Deleuzian-Baradian acolytic new/post “qualitative research” in education how academics must be “on trend” in the fashionable “turning” of theories, their exclusionary languages, and adherence or compliance with “latest” trends in scholarship and/or its authors (Rodrigues et al., 2020). Petersen’s (practical) “theorizing” of a silenced and absented other of intercorporeal encounters and intersubjective chats in educational research body ~ timespace settings is generated inductively and abductively. Her somewhat auto-phenomenographic study helps us attentively and empathically “see” and “body” that which, too often, we uncomfortably refuse or awkwardly refute, but “know”, be it in feminist and/or masculinist research. Petersen’s (2016, pp. 12, 13) anecdotal descriptions of the “academic” careers of “ageing” and “youngish” intellectuals makes for sobering reading.¹⁴ As does Petersen (2018, pp.7, 8) in her related critique of new materialist “tropes” in the “new” praxis of “data”, exemplified as suddenly materialized “Hong Kong air” (it finding us!) in the ahistoricized “now” of a posthuman performative research practice. Petersen’s unique critiques of “temporal becoming”, including “turning theories” and “data” also challenges, more broadly, the deeper problematic of how new/post academics are “repositioned” in the “spaces” of professional/personal “ethics”, as an intergenerational (de)politicizing of educational research.

Yes, it does “matter” practically. We do have a materially lived problem if new/post theory in performatively abstract EER is not only temporally problematic but spatially downloaded around the globe, constantly sloganed through exclusive and unintelligible jargon, uncritically promoted and rehearsed, undertheorized, not internally debated externally in relation to, or “interaction” with rival theorizations or explanations, and what EE might *become* “ecologically” in the post-Anthropocene. The practical problem of performative abstraction compounds when already fragile theories of EE, and underwhelming methodological approaches in EER, remain under-researched, and historically vulnerable to the politics of misrepresentation, depoliticization, and delegitimation of scholarly effort in EE, EER and their praxes.

In summary, an embodied ~ timespace memory-work in, of and *for* EER is demanded, urgently. Remembering the field “critically” and “praxically” will help mitigate the overwhelming symptoms of the new/post amnesia of the moment and its universalizing, if not imperializing, re-inscriptions of agents and agencies within a now digitalized and platformed global politics of misrepresentation. This will take courage in the postmodern university, publishing houses, and associated forums and forms of intellectual exchange, agential relations, and embodied materialism of activist praxis. At the most basic level, in the “ruins” of the “post”, there needs to be a renewed commitment to critical/historical reviews of EE and EER literatures. Research problem identification and clarification needs to be slowly formulated and sharply grounded in the materially and symbolically “relevant” and purposeful. The framing of EER, individually and collectively, and stratified across embodied, social, local, structural, cultural, ecological and planetary scales, needs to be revitalized in many different practical ways.

Unless we learn from the positive and negative lessons of the past, we are doomed to repeat our historical mistakes via the new/post performative abstractionism of academic intellectual exchange within the amnesiac global North and its recolonized global South. With scholarly criticism, engaged debate, a revitalized politics of inquiry, and ethico-political praxis serving as academic midwife in EER, actions speak much louder than words.

The 18 month-long engagement of Seminar participants contributing to this Special Issue has been “more-than” fruitful in creating a South-North dialogue about the global politics of knowledge production in environmental education research.

Notes

1. “Criticism” is a key method of the post-Marxist “critical theory” of The Frankfurt School established in Germany in the aftermath of WW1. Prominent theorists working within a “historical-materialism” frame of inquiry and critique included Horkheimer, Adorno, Benjamin, Marcuse, and Habermas. Key themes of criticism included the development of capitalism, the culture industry, psychoanalysis, philosophy of history, the mastery of nature, instrumental reason, epistemology and method, the scientization of politics, knowledge and action, and reflexivity. My second and third critiques are partially inspired by Marcuse’s (1964) formulation of “paralysis of criticism” or a “society without opposition”, but also Fay’s (1987) critique of the limits of critical social science’s account of liberation (in EER, see Payne, 1999, p. 187). More recently, Noys (2010, 2014) criticism of the “accelerationisms” of Deleuze and Guattari, Lyotard and Baudrillard adds valuable insight into the status of criticism in the contemporary condition of theory, society/culture, and time/speed (see also, for example, Virilio, 2007/2010, and in EER, Payne, 2018c). On Marcuse and ecopedagogy, see Kahn, 2010. For criticism in Educational theory and “critical pedagogy” in the North, particularly in the 1970s and 1980s, see the respective works of Stanley Aronowitz, Michael Apple, Henry Giroux, and Peter McLaren. In the South, see Paulo Freire’s “pedagogy of the oppressed” and Ivan Illich’s “deschooling society”. Freire briefly mentioned Marcuse’s criticism of technology. Freire and Illich are rarely cited in the North, thus highlighting the “organic” and community-based focus of their respective criticisms of society, culture and schooling. Freire was not inspired by, or driven by theory. Springer et al.’s (2016) “radicalization of pedagogy” in Geography is one of the few contemporary theorists in the North who extensively draw on Freire and Illich. In EE, see Payne (2017) on Springer.
2. See, for example, from the 1960s Novick and Cottrell’s (1967) *Our World in Peril* and, more recently, Diamond (2005) on the ecological collapse of “past” and “modern” societies, and Read & Alexander’s (2019) prognosis for the “finish” of industrial civilization.
3. An earlier *JEE SI* provided a (Northern) synthesis of a political ecology of education (Meek & Lloro-Bidart, 2017). Instead, Barad and Braidotti, and the frequently cited Haraway or Deleuze & Guattari are favourites in the new/post of EER. Rarely are those authors’ theories critiqued. The structures they speak to socially and/or ecologically are not explained. Their practical relevance to any of the preceding ecologies of EE is not questioned. Their imported texts are authoritative and inscriptive in the new/post moment. Prior to the new, it was the post of “thinking theory” with the textual power of Butler, Foucault, even Spivak to be mentioned later, and Derrida in educational research in the global North (Jackson & Mazzei, 2012). None are acknowledged environmental or ecological theorists.
4. The always prescient Aldo Leopold (1949/1966, pp. 291–295), well known in the global North, particularly the U.S.A, emphasized the ecopedagogical imperative of “promoting perception” where “our reaction to it” (the outdoors) depended not on the quality of what he (*sic*) saw, but on the quality of the mental eye with which he saw it”. However, for the historical, critical, ecological purposes here, Leopold was acutely aware that “the PhD (in ecology) may become as callous as an undertaker to the mysteries at which he officiates”.
5. In terms of this SIs global North-South production of knowledge, Northern analogies for Earth like “Sunship” or “Spaceship”, and Hardin’s “lifeboat ethics”, notoriously fail to differentiate between the rich and the poor, or haves and have nots, as to who inhabits, or is saved, or not, when the carrying capacity of the (rescue) ship or boat is extremely limited.
6. For historical, empirical, conceptual, and comparative purposes, I briefly note how the ecopolitical critique of patriarchy has variations. The social ecologist, Murray Bookchin (1982) observed how (patriarchal) cultures expressed the “hierarchically” driven oppressions of women and nature for which their “dissolution” was a particular “political” priority. Bookchin’s “synthetic environment” (Bookchin, 1962/2018, published under the pseudonym Lewis Herber) was a historical-materialist critique of the toxifications of human-environment intra/inter actions and relations created industrially and structurally by chemicals, pesticides and herbicides, medicines, additives, food processing and packaging. Rachel Carson’s (1962) classic *Silent Spring* focussed mainly on herbicides and pesticides. Bookchin’s “ecological society” (Bookchin, 1980), early “ecoanarchism” (Bookchin, 1971)/later “Communalism” (Bookchin, 2007), and method of “dialectical naturalism” (Bookchin, 1990) combine in “social ecology” as a “partner” like critique with early ecofeminism’s critique of the patriarchal assumptions of deep ecology “theory”. While Bookchin did not focus sharply on the question of essentialism, ecofeminist social ecologist Chaia Heller (1999) did in her powerful and persuasive *Ecology of Everyday Life*.
7. Julie Stephens (1990) poststructural type feminist counter-representation of third world women is an example of Salleh’s (1990) critique of the non-reflexive “discourse determinism” of poststructuralism’s collusion with the “master project” of patriarchy and, subsequently, the politics of representation of ecofeminism.
8. I will not detail the (materialist/relational) ecofeminism literature in EE/EER excluded from the field’s new/post discourse, such as Di Chiro, (1987) and Payne (1994, 1997). Like Salleh, and to a large extent, Val Plumwood’s (1993) better known ecofeminist views outside Australia, those bodies/voices have not been included in the new/post of EER, even by Australian academics. Re-presencing how those contributions anticipated the treatment of “essentialism” in the new conceptions of “discursive-material practices” in EER is instructive, but beyond the immediate purposes. Why? The stakes are massive. In a nutshell, over the past decade, the *excessive* hubris, rhetoric, and claims of “posts”, including structuralism, nature and now human within the “new” of materialisms lays bare the old debates about nature/nurture or Nature/social (de)constructionism. Two “seminal” texts published over two

decades ago, for example, laid the “foundation”, conceptually and philosophically, about the contested and changing nature of Nature (Soper, 1995; Soule & Lease, 1995). Very rarely are those seminal “texts” referenced in the ahistorical and atheoretical new/post EER amnesia of the moment.

9. Some versions of posthuman theory endorse the role of technology, noting Braidotti’s “ambivalence” about it, while most transhuman theory valorizes the role of technologies.
10. Undoubtedly, there are other strong candidates, such as the sociology of the environment or environmental sociology, cultural geography, ecological psychology, each of which demonstrate enduring commitments to the empirical qualification of theoretical and methodological development.
11. Graham Harman’s (2016) “social theory” interpretation of his broader philosophical engagement of “object oriented” philosophy within the umbrella of “speculative realism” contrasts nine axioms of his “immaterialism” and “new materialisms”. Suffice to say, even footnoting these debates highlights the atheoretical nature, and ahistorical nature, of the rise of performative abstractionism in EER.
12. Out of respect for “theorists” (Dreamers, narrators, wayfarers...) of *Indigineity*, I leave it to others in Indigenous/ Aboriginal/First Peoples Studies to bring to presence, co-presence, and representation those historical cosmologies and ways of being/becoming (but see also, for an “Australian” example of ecopedagogy as/in foodScapes, Ma Rhea (2018).
13. Frances Barraclough’s English translation concedes the impossibility of representing the “nature” of Arguedas’ creation of terms fusing Quechuan and Spanish languages.
14. There is, unfortunately, disturbing anecdotal evidence (global North) about how academic critics of new and post theories in EER are being censored, or vilified, or intimidated, or excluded from various forums, spaces, workplace settings and edited publications.

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