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RESEARCH ARTICLE



MovementScapes as ecomotricity in ecopedagogy

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ABSTRACT

This elaboration of an ecopedagogy in movementscapes aims to present an empirically informed account of the concept of *ecomotricity* as manifested in the living body interacting in/with nature (human-and-other-than-human). This interaction is ludic (where pleasure or joy/happiness gives meaning to the lived experience) and ecological (ecosomaesthetic-environmentally ethical-ecopolitical) and provides for revitalized and animated ecopedagogical practices (and research). Critical examples and insights are presented as *praxical* evidence of how the ecophenomenological and ludic essence of ecomotricity challenges individuals in particular movementscapes to question their ways of being-in-the-world as a form of ecobecoming potentiality. This step towards the (de)(re)construction of environmentally oriented outdoor experiential learning in moving body-time-space relationalities is, potentially, significant to overcoming some of the ontological limits to rational change too often uncritically presumed pedagogically regarding human-nature relations.

KEYWORDS

ecophenomenology;
environmental aesthetics;
environmental education
research; human motricity;
physical/sport education

Of movement and, of thought

Within the literature about the ontology of movement, by focusing on the intentional movement of transcendence, or motricity, as defined by Manuel Sérgio (2003), in/with nature, this elaboration of an ecopedagogy as/in scapes aims to present a critical, empirically informed account of the concept of *ecomotricity*, in its philosophical dimensions and its (eco)pedagogical enactments and associated possibilities, in different movementscapes. In any ontologically oriented project, the epistemological limitations that inform ecopedagogical development, as well as relevant methodological issues and challenges, must be addressed. Some of these broader issues become clearer in the following account of current transitions from phenomenology to ecophenomenology that are reframing inquiry.

Conceptually, ecomotricity calls for a paradigm shift of “thought” aligned with that which is implicit to a “phenomenology of perception” (Merleau-Ponty, 1996), a “phenomenology of the body” (Ingold, 2000; 2011), an “eco-phenomenology” (Brown & Toadvine; 2003), or what now in contemporary theory is referred to as the “corporeal turn” (Maxine Sheets-Johnstone, 2009) or “intercorporeality” (Gallagher, 2016), reinterpreted in environmental education theory and practice (Payne, 1997) and methodological inquiry (Payne, 2013).

Collectively, they problematize the notion of intersubjectivity. In elaborating the “scope” of motricity, perception and the sensing body itself are central to human-world interactions, relations, and socioecological (re)formations; however, it is through motricity that all meaning is created in these actions, relations, and formations. Hence, the concept of motricity conceives a body, and moving bodies of continuous action, a living body of/in intentional and immanent movement to/with the world and to/with

others. Aligned with this concept, ecomotricity embraces this living and moving body/ies interacting in/with nature (human-and-other-than-human), where this interaction is *ludic* (where pleasure or joy/happiness gives affective/perceptual and physical/sensory meaning to the lived experience, often playfully) and, therefore, an ecological (ecosomaesthetic-environmentally ethical-ecopolitical) warrant for revitalized and animated ecopedagogical practices (and research).

Pedagogically, ecomotricity challenges conventional applications of Cartesian inspired ontology as epistemology in education theory and practice in, for example, physical education pedagogy and its emphases on [bio]mechanical and exercise physiological studies, skill acquisition techniques and models, and functional/performative measurable outcomes. Broadly, Cartesian ontology, epistemology and methodology historically views human movement as mechanized and instrumentalized concepts and accounts of “physicality” and pedagogies for it. Environmental education and outdoor/environmental education practices highlight the importance of experiential learning and field trips, often over extended periods of time in different outdoor and natural settings. Various movement experiences in different scapes are, therefore, central and require the scoping of ecomotricity in those scapes and their contexts.

The version of ecomotricity formulated here and qualified through empirical studies (Albuquerque & Rodrigues, 2017; Rodrigues et al., 2017; Sacramento & Rodrigues, 2017) examines “ways of moving” in/with nature. The ecomotricity of movementscapes therefore anticipates an extended somatic understanding of phenomenological (being-in-the-world) and playful (*ludic*) experiences/experimentations of the moving body in time (*Kairos*, Rodrigues & Stevaux, 2010) and space (*Chora*, Walter, 1988). In this sense, the numerous material and geographic scapes of ecomotricity share common grounds with other (human decentered) ecopedagogies: a nature (human-and-other-than-human) driven design and affordance of movement that ontologically, epistemologically and methodologically “moves” a different practical way into the creation of meaning in/for critical and environmentally just education.

The underlying presumption in formulating an ecomotricity ecopedagogy of movementscapes is that movement is intrinsic to all human and other-than-human beings. Movement includes the flicker of an eye, walking in a forest, swinging on a tree, and so on, all of which are readily accessible to the question of motricity. Movement also includes leaves and trees blowing in the wind, waves crossing the ocean, a rock decomposing over thousands of years, and the moon rising and setting. From these ontologies of being, epistemologically developed ecopedagogies as/in scapes raise a series of basic practical, empirical, conceptual, theoretical, and methodological questions about: a) the basics of movement in different environments; b) historical trends in movement into categories of physicality/ability, age, gender, ethnicity, and class in, for example, traditional sport/recreational oriented experiences in nature; c) overly idealized/romanticized sets of (desired/fancied/fantasized) commodified forms and styles of movements in nature-culture relations; and, d) potential motricities (in-action/intra-action) of non/other than human bodies/beings/environments, an idea that contests a fundamental notion of the original concept of motricity, thought as being an exclusively human quality.

There are, however, numerous limitations that must be considered at the outset of this formulation of ecopedagogy as/in movementscapes when thinking about and theorizing the critical potential of ecomotricity as an ecopedagogy that goes beyond the deeply rooted “naturalized” limits to change. Among these limitations are those already pre-conceived patterns and styles of expected “ways of moving” and “what to feel” based on how experiences in nature are imagined (social imaginary), largely as a result of our historical recreational/sportive instrumentalized and mechanized relation to nature (for example, Rodrigues & Payne, 2017) and of how these experiences are “sold” by the cultural/leisure entertainment industry (Rodrigues, 2012b). These patterns of the instrumentalized consumption of movement shape much physical, outdoor, health, and environmental education pedagogies and research (Payne & Rodrigues, 2012; Rodrigues & Payne, 2017), as well as their curriculum/programmatic settings in elementary, secondary and tertiary sectors (Rodrigues, 2015a; 2015c).

By way of introduction, the critical theoretical/empirical scoping of ecomotricity presented in this synthesis of an ecopedagogy in movementscapes aims to shed some light on the possibilities and limitations for the development of praxical educational processes in body-environment/nature interactions. I focus on the normalization of (aesthetic, ethical and political) values of ecomotricity as they

are located historically, geographically and culturally within the individual's movement habitus. Theoretically, this formulation questions the (direct/circumstantial) reach of ecomotricity in contrast to known limits to change, presenting possible frameworks and methodological insights.

Practically, it presents nonidealistic scenarios where ecomotricity could integrate ecopedagogical practices, including in other scapes, such as school settings (Rodrigues, 2015c), outdoor recreation/leisure (Rodrigues & Silva, 2011), urban and national parks (Dunkley, 2018), open space settings (Lugg & Slattery, 2003), canoeing a river (Stewart, 2018) or even, simply, just floating/snorkeling/swimming (Whitehouse, 2018), or walking and rock pooling along the beach as its sand, waters, wind, and sun are also in movement. Methodologically, it highlights how research into a moving scape via ecopedagogical practices requires certain experimentations in logic and method (Payne, 2018).

A moving world, or a world of movement? Some necessary backgrounding

There is a great difference between the two world views presented in this heading. "A moving world" presupposes a materially constituted world in continuous movement, where living beings and objects constantly interact in a complex and chaotic system. A "world of movement" presupposes that worlds themselves are constituted in and by movement. A moving world is a place of physically constituted matter (in movement) and objectivity arises from rational interactions with that world. In a world of movement, there is only space because I have a body that moves—body that is not a fragment of space, much less a fragment in space, but incarnated space; it is not a physical region, but an ontological region where existence is objectively constituted (Husserl, 1988); beings are in the world, so as the world is in beings—there is no possible fragmentation: looking at an object is coming to inhabit it (Merleau-Ponty, 1996).

Conceptually, ecomotricity is located within a world of movement, aligned with a phenomenological view of being-in-the-world which has greatly impacted environmental studies, especially in the last twenty years, inspiring an ecophenomenology (Brown & Toadvine, 2003) and a phenomenology of the body (Ingold, 2000, 2011) that has had a more direct sway on a "corporeal turn" (Sheets-Johnstone, 2009) and, subsequently, constitutes another move to intercorporeality (Gallagher, 2016; Payne, 2013). All are representative examples of movements characterized as holistic or ontological (in the sense of a return to the body or to the moving essence of "being"). These movements differentiate themselves as "alternative" to the "traditional" (Cartesian, materialist, positivist) by acclaiming the primacy of perception in movement as the main intermediation/flesh/chiasma of the body with/in the world, implying a dialogic, integral/nonfragmentary relation.

In Physical Education, a field I am academically trained and practiced in, traditionally linked to studies in human movement, these tensions appear more clearly after the 1970s, along with the flourishing of critical theories of physical education pedagogy (Kirk, Macdonald, & Tinning, 1997). In particular, the incorporation of existentialist philosophies (especially phenomenology) in physical education discourse partially paved the way for a reconception of the body that defied the classical materialist/positivist definition of the body as a mere "casing" (*res extensa*, according to Descartes, 1973) which could be de-composed and explained anatomically and biomechanically. Following the work of several authors (e.g., Arnold, 1979; Brown & Payne, 2009; Moreira, 1992; Santin, 1987; Sérgio, 2003; Thorburn, 2008; Whitehead, 1990), discussions were raised in the field of physical education about the phenomenological ideal of the primacy of perception in our "incarnated body" (Merleau-Ponty, 1996), a holistic body that is embedded in the world. This "first-person body," which we know directly in the context or process of being alive (Sheets-Johnstone, 2009), sustains the conception of motricity, by which one communicates, expresses, creates, learns, interacts with the environment through a body that is not the "[...] simple result of associations established in the course of the experience, but a holistic/ecological awareness of my posture in the intersensorial world" (Merleau-Ponty, 1996, p. 143). In short, motricity urges consideration of an integral body that manifests itself from that integrity – "movement and perception are seamlessly interwoven; there is no 'mind-doing' that is separate from a 'body-doing'" (Sheets-Johnstone, 2009, p. 32).

This “conscious body” is, according to Merleau-Ponty (1996), sustained by an “intentional arc” (all consciousness is of someone or something); motricity can, thus, be conceived as “original intentionality”—an integrated unity of a consciousness imbued with intentionality and a body endowed with movement forming an existential meaning, a dialectical relationship between a body of continuous action (in-action [*enacción*], as indicated by Varela, 2000 and Toro-Arévalo & Mautz, 2012) and the world (Sérgio, 2003). Where being in motricity is an integral, continuous, holistic opening to the most radical reality of life, motricity assumes a founding character from where new ontologies are born, from a primordial complicity with my own ontogenesis as a being that is renewed individually, socially and politically (Sérgio, 1999).

Conceiving a world of movement, especially in the context of an imaginable (inter)corporeal turn, motricity poses an epistemological defiance:

Human motricity can justify itself scientifically, from a particular theorization which takes account of the body and of movement, or better: human as a whole, in virtuality to action, on operative intentionality, as personal response to calls of transcendence. Motricity is a transcendental structure of human life, prepared for the most radical call (which requires fundamental choice) that guides us to change. Human motricity’s dynamism is rooted in an ontological experience of communication and desire to change. (Sérgio, 1999b, p. 39 – my translation)

The Brazilian poet Raul Seixas sang that “we are each a whole universe” (1976—my translation)—manifesting motricity at every breath, living beings constantly (re)create a unique indissoluble unit, a world fundamentally built in relations with others and with the absolute (Sérgio, 1995).

The “eco” in motricity—some necessary foregrounding

Lying down in the cold sand of a beach, a person watches the blue sky, while hearing the waves breaking and feeling the cool breeze in her/his face. There are at least two ways of scoping many movements here, pedagogically and methodologically, in environmental education research (see Payne, 2005). One “scientific” way of explaining this “real” scenario is by depicting a rational person that has learned the physical attributes of sand, sky, waves and wind and understands how each of these elements is affecting his/her body while it occupies that space at that exact moment. Another “artistic” way of interpreting the same scenario is a world in continuous construction by the interactions of moving bodies, a much harder scope to access and represent.

In the former scenario, each element has constituent physical attributes that make them generally identifiable and measurable – the person feels the cold of the sand, watches the blue of the sky, hears the sound of the wave and feels the breeze of the wind. In the latter scenario, the elements are constituted in the flow of their interactions, creating specific meanings in each moving encounter—to the person lying in the beach, the cold is the sand (not the feeling of cold that comes from the object “sand”), the blue is the sky (it is light, not something seen in the light), the breaking waves are their sound (not objects that make a sound) and the wind is its feel (not the touch of an object). “Far from being disclosed to us as targets of perception, waves, wind and sky were present as an all-enveloping experience of sound, light and feeling [...],” interprets Ingold (2011, p.134), portraying how Merleau-Ponty would describe this scenario in an imaginary dialogue with the eminent environmental psychologist J. J. Gibson, whose work stressed the “affordances” of environments (Gibson, 1979).

In agreement with Merleau-Ponty’s view, the relational, intercorporeal essence of being-in-the-world presupposed by the concept of motricity has deep ecological implications. Oddly enough, the one that will be emphasized here—the potential motricities (in-action/intra-action) of non/other than human bodies/beings/environments—contests a fundamental notion of the original concept of motricity. Conceived upon the principles of intentionality and transcendence and anchored on the idea that these are exclusive human traits, motricity is originally conceptualized as an exclusively human quality. But going back to Merleau-Ponty’s view of the world described in the first paragraph of this section, how would non/other than human bodies/beings perceive the environment if not immanently (see above), exactly like the description of the person’s phenomenological experience at the beach?

Aiming this approximation would imply, however, challenging the preset scopes of transcendence and intentionality, and immanence and reciprocity. The concept of transcendence would need to extend beyond the anthropocentric idea of the constant “conscious” human drive for “being more” (Freire, 1992), being understood as the sensorial fabric of survival felt by all living beings, a shared sense that pushes all beings to constant movement. As for intentionality, understood as “corporeal-mundane and existential behavior in which the signified world is constituted and reconstituted” (Fiori, 1986, p. 4—my translation), there can be no distinction: a person’s intentionality while drinking a glass of water or eating a piece of fruit; a bird’s intentionality while sipping a drink from a pond or feeding chicks in the nest; a tree’s intentionality while pulling water from the ground or sprouting a new leaf searching for the sun—these are all examples of signified worlds/environments being immanently constituted through intercorporeal-mundane and existential actions and interactions that, invariably, are mutually presenced and co-constitutive, or reciprocal. If so, the dominant Cartesian separation and disconnection of human and other-than-human is more clearly dissolved.

Thinking more specifically about ecomotricity: it is easy for us to imagine the ludic experiences of a puppy or kitten, or even a wild cub fooling around with its siblings or parents. But let’s take this a step further: could we say insects or plants are susceptible to ludic experiences? If a ludic experience is defined as one where pleasure or joy/happiness gives meaning to the lived experience, we can associate pleasure or joy/happiness to an ideal *flow* (Csikszentmihalyi, 1990) of intercorporeal-environmental synergy where an expected positive interaction is anticipated. In that sense, could we imagine, for example, the moment where a grasshopper finds the right current of wind to glide to the next food source, or where a monarch butterfly reaches a mating haven in the forests of Mexico, or where a tree flourishes or spreads its seeds as ludic experiences? Trees, for example, are stressed in prolonged dry conditions where the absence of rain destabilizes and, potentially, destroys both intra and interactions of/in nature. In any case, the questions presented in the above paragraphs create scenarios where ecomotricity can be greatly distinguished from other normalized, often instrumentalized and commodified, body-environment relations of performativity: in opposition to an anthropocentric “connection to” nature, ecomotricity is expressed as an immanent movement of humans-and-other-than-humans-being-in-nature.

Overall, this might be the most significant contribution of the concept of ecomotricity to both the practices and emergent, but still nascent, theorization of ecopedagogy as in allScapes, as well as its research “moving” into (eco)methodological critique and inquiry. Ecomotricity is movementscapes in different environments and their time-spaces asserts a relational/interactive ecological presence and affordance or enabling of a more environmentally ethical, as well as ecoaesthetical and ecopolitical posture of movement: intentionality and transcendence not as characteristics that distinguish humans from other-than-human beings (notion that strongly contributes to an anthropocentric being-in-the-world), but as the exact qualities that immanently binds all living beings in a decentralized, intercorporeal movement of reciprocal existence. These preceding “reversals” further emphasize points from the Introduction to this special issue (Payne, 2018). Ecopedagogically, this could mean a nature (human-and-other-than-human) driven design that ontologically and epistemologically/methodologically *moves* a different way into the ecomotricity scoped creation of meaning in/for critical and environmentally just education.

In the following pages, to experimentally “test” the above backgrounding/foregrounding, a set of empirically supported studies and cases are presented in a synthetic elaboration of an ecopedagogy as scaped through ecomotricity as praxical evidence/examples of movement experiences, demonstrating some only of the above conceptual aspirations and its practical limits in action.

Playing the field—What we can learn by flirting with what’s out there

Since August, 2014, I have led a research project named “Ecomotricity in the state of Sergipe” (<http://ecomotricidade.blogspot.com>) at the Federal University of Sergipe (UFS), Brazil. Over the last three years, the project has investigated local examples of body-environment relations in different ecomotricity contexts. Our aim is to identify categories of movement in spaces/times that substantiate insights into questions about: a) how contexts of ecomotricity influence body-environment relations,

and; b) how human-environment relations in contexts of ecomotricity influence human-world perceptions. The focus and scope of the project emphasizes the possibilities and limitations for the development of educational processes in body-environment relations, especially the normalization of (aesthetic-ethical-political) values of ecomotricity located geo-epistemologically within the individual's movement habitus.

The project was developed through three interconnected phases: a) qualitative textual analysis of published articles that discuss body-environment relations (Sacramento & Rodrigues, 2017); b) observational field research using ethnographic/ecophenomenological methods of local examples of body-environment relations in different ecomotricity contexts (Albuquerque & Rodrigues, 2017); and c) open dialogue between the researchers and the general public about emergent research findings using virtual technology (results open sourced in digital platform where interested parties have the opportunity to contribute to the research by commenting, contesting results, suggesting changes or new settings for the research, sharing particular experiences and narratives; Matos & Rodrigues, 2017).

The qualitative textual analysis (Morales, 2003) of 93 published articles (criteria for the selection of the *corpus*, as well as the integral composition of the *corpus* in Sacramento & Rodrigues, 2017) disclosed a wide range of significant convergences and divergences between different terminologies used to describe and discuss body-environment experiences. Discussing terminologies implies thinking about all that is implicit in the constitution of a name. It essentially involves language and culture, most importantly, how changes in how we name “things” (discursive deconstruction/reconstruction) puts in evidence how we, as a society, imagine/idealize/conceive these “things” (social representations).

Inescapably, in a name there is local, regional and (in a globalized society) global history; it defines, places and speaks for the object, as well as for those associated with it—theoretically, practically, and conceptually; it both reflects and constitutes motivations, meanings, perceptions. Accordingly, a terminology that aims to categorize experiences in nature is never merely descriptive: it embraces body-environment relations in deep and meaningful ways. Canaparo's (2009) “geo-epistemology” is an insightful examination of the various means of productions of “locations of knowledge,” notably in “Latin” America in which this (Brazilian) author/researcher is positioned and constituted not only by historical and colonizing language(s) and culture(s), and their framing logics and “methods” (Payne, 2018), but, often invisibly, through its diverse geo-ontologies and histories, or environments/natures as memoried, inscribed, or reassembled.

Despite the great number of terminologies identified in the researched articles, most were directly associated to adventure (adventure activities; adventure sports; physical adventure activities; corporeal adventure practices in nature; adventure activities in nature), sport (sports in nature; adventure sports; radical sports; sportive experiences in nature) and leisure (leisure in nature; recreational experiences in nature; leisure practices in natural areas).

About adventure—keeping alive certain traditions related to the early history of ludic experiences in nature, especially associated with the scouting movement, (military) excursionism practices and outdoor education schools (such as Outward Bound), adventure activities still play a fundamental role in our representations of nature and movement in it (Rodrigues & Payne, 2017). So, we might ask: What practical, historical, and symbolic role does adventure play in contemporary accounts of physicalized and skilled/competent body-environment relations? How do we conceptually constitute and incorporate/naturalize different meanings of adventure (risk, survival, fear, security, curiosity, leisure) and how do these movement experiences of outdoor sports in nature influence body-environment relations (locally/regionally/globally)? Why do certain groups of people seek adventure in nature? What do they expect from an adventure experience and what are their perceptions afterwards? How does it shape a conception and construction of nature, a national park, a wilderness, and associated pedagogies? What can be learned from an adventure experience and how does it “speak” and “name” the (eco)somaesthetics-ethics-politics of body-environment relations and, more specifically, environmental perception/education? The same kind of questions could be asked about sport and leisure traditions in nature, including tourism (Nakagawa, 2018; Whitehouse, 2018).

Despite the relevance of such questions, they are rarely asked in contemporary studies of physical education in Brazil, at least as evidenced in our research of the 93 articles. Predominantly, what we

found is an instrumental view of body-environment relations in which nature is a largely anthropocentric “way towards” or instrumental “means to” health, well-being, quality of life, education, and “leisured” occupying of free time. Also easily observable in the analyzed discourses is the incorporation of key elements of the ecological turn, especially in how the described experiences should be sustainable (socially; economically; pedagogically); however, this is less typically evidence of change and more typically new ecological “fittings” to the same old practices, more “green-washing” than environmentalization (the latter meaning change in habitus by incorporating environmental codes and values) (Rodrigues, 2012b; 2015b).

Moreover, there is an overall issue about the clear limits of each of these terminologies in relation to the wide variety of possible experiences in nature, especially considering pre-defined, socially constituted/ incorporated meanings of adventure, sport and leisure, respectively. In addition to creating confusing “frontiers” between these categories (where one and another begins and ends), there is a whole range of possible experiences in nature that are simply left out. This is where a fundamental concept of ecomotricity plays in—intentionality. Where intentionality embraces ecological interactions with the environment, ecomotricity is contextualized in terms of the affordances and reciprocities of intra- and interactions, in shifting ludics, to an immanent posture in and of various movements of beings and things. This “holistic” conception embraces a whole new dimension of experiences that speaks to and about body-environment relations, many of them ignored, or not presented and nonrepresented as possible ecopedagogical practices and research topics, including their potential in opposing historically fashioned trends (physicality, ability, age, gender, ethnicity, class) in sport/recreational oriented experiences in nature, as well as idealized or romanticized sets of (commodified) movements in body-environment relations.

From this textual/discourse study of how movement is represented as names in texts, we offered a range of implications and conclusions relevant to the potential of reconstructing practices. Surpassing instrumentalized views in human-environment relations and the tendency to green-washing in the incorporation of the environmental discourse are two difficult conceptual challenges when thinking about the critical potential of ecomotricity as an ecopedagogy, challenges that go along and maybe beyond overcoming the deeply rooted “naturalized” limits to epistemological change in the absence of those immanent others. But the hardest challenge evidenced by the presented textual analysis may very well be overcoming preconceived patterns of expected “ways of moving” and “what to feel” based on how experiences in nature are (socially) imagined and represented as a produced location of knowledge, or geo-epistemology, following Canaparo (2009). The next two sections project possibilities on how these preconceived patterns of movement experiences may be contested, presenting data from empirically based research, respectively, from field research on ecomotricity and an ecopedagogical experience account in ecomotricity in higher education settings.

Face-to-face and moving with—nosing around; digging deep; learning in movement

To see a world in a grain of sand
And a heaven in a wild flower,
Hold infinity in the palm of your hand,
And eternity in an hour.
Auguries of Innocence – William Blake (2004)

In phenomenology, “going to the thing itself” is crucial. Accordingly, beyond the literature critique described above, associated field research was designed to learn about the potentials of ecomotricity in experiences in nature from individuals that engage in these experiences regularly—at least once a week in the last two years (or more; Albuquerque & Rodrigues, 2017). To that end, a coordinated eight step ethnographic/ecophenomenological methodological framework set the basis for 18 studies of individuals who regularly surf, mountain bike, stand up paddle, hike, mountain and street run, rollerblade, and skate. These outdoor activities and movement experiences in a range of environments, such as sea, river, mountain and urban scapes demanded a flexible methodological framework aimed at critical appraising the potential of interpreting ecomotricity in experiences in and of nature, targeting, especially: the aesthetic constitutions and representations of the experience; intended and consequential

associations (connections), and dissociations (gaps) between the experience and daily life; and personality traits of the individuals involved in the various experiences.

The eight-step methodological framework included: filmed interviews, turned to text by literal transcription, word by word, including equally significant nonverbal/body expressions like looks, sighs and silences; dialogue with the participants while watching the filmed interview, inviting changes to previous answers and including new information registered in a “dialogue journal”; “sketches” from the participants about themselves and about their experiences in nature through free (auto)narratives, open to a variety of linguistic expressions, such as poetry, drawings, photographs and videos; personality accounts from known third parties (family members and friends) and through social profile analysis, where participants and researchers review together the participant’s social profiles (Facebook and Instagram) registering critical accounts about “built personalities” in the dialogue journal; ethnographies in movement, later portrayed by the researcher in free narratives; glossary of expressions, elaborated cooperatively by researcher and participant, registering details in speech that reflect particular nuances of experiences in nature. A full description of the methodological framework is published in Rodrigues et al. (2017).

A more thorough description of the results from this empirical research would exceed both the aims and the word limits for this article (see Albuquerque & Rodrigues, 2017). However, two particular elements of an ecopedagogy involving ecomotricity must be highlighted: time and immersion. During the first contacts between researcher and participant, especially during the initial interview, participant responses were more “automatic,” usually expressing the common jargons associated with the socially constituted representations of both the activity and nature, confirming what was found in the textual analysis of the published articles described above. However, due to the dynamics of the methodological framework, the ethnographic/ecophenomenological inquiry allowed participants to constantly reflect upon their experiences: how the answers they gave during the initial interview contrast to their next experience in nature, to their free narrative expressions (often expressed through poetry, drawings, pictures and short films), to the shared experiences of the mobile ethnographies; how the way they first portrayed themselves in the interviews contrasts to the descriptions from friends and family, to their own more detailed (auto)narrative portraits, to their “built personalities” expressed through public social profiles, furthermore, how much and in which ways these personal representations are influenced by their engagement in experiences in nature; how particular expressions of their interactions in nature (glossary) portray aesthetic-ethical-political aspects of these experiences.

In this sense, the research *itself*, arguably another *thing* in itself, embodied an ecopedagogical inclination, constantly daring the participants to phenomenologically “memory” their experiences in suspension, questioning the reflexive ways of being-in-the-world, and contrasting these memories with their aesthetic-ethical-political assumptions and aspirations. These aspirations were constantly confronted by the ludic essence of “being” (in/with nature), where not seeking health, quality of life or performance, but experiencing pleasure or joy/happiness in “being” is what provided meaning to the lived experience, with meaning commonly expressed as love, peace, joy, plenitude, synergy with nature and spirituality.

Moreover, the ludic essence of “being” is sensitive to a perception of time as *Kairos*, opposed to *Chronos*, as well as the perception of space as *Chora*, opposed to *Topos*. In a nutshell, *Kairos* pronounces the subjective relativity of time to the particular body, as opposed to the resolute, unwavering clock determined time in *Chronos* (Rodrigues & Stevaux, 2010). In the same manner, resting between the sensible and the intelligible, *Chora* pronounces the ambiguity of space where being takes place, while *Topos* suggests mere location or the objective features of a place (Walter, 1988). Where (etymologically and representationally) *Chora* is choreography (composition), *Topos* is topography (precision). In this sense, *Chora* can be more closely associated with Gibson’s concept of “affordance,” expressing the structural possibilities or availabilities offered by the environment, as well as the agent’s structural capacity in perceiving what is accessible to his/her actions (Gibson, 1979). Another possible association is the concept of *Gelassenheit*, as used by Heidegger (1962), signifying an openness before “What-Is,” an availability to letting things be in their uncertainty and mystery.

In empirically testing the jargon of a range of activities in different environments and natures, as a social construction, the methodology of an ecophenomenological deconstruction via ethnographic

means revealed the limitations and excesses of language to condition, or govern/discipline, and selectively reduce the ecologies of environmental experiences to narrow patterns and representations that inhibit or restrict the diversity of body-world relations in *Kairos* and *Chora*. In the main, what is aspired to in revealing the deconstruction of naturalized structures is change, which is also central to a theoretical/empirical account of ecomotricity, even more so if this scoping critically engages possible developments in *praxical* educational processes in body-environment/nature interactions.

Eluding idealisms in/through language is crucial and such limiting factors for change need careful consideration, such as the naturalization of social structures in which movement occurs and ecomotricity scopings come to the foreground. These can be characterized by the incorporation (in Portuguese, *incorporação*; *in-corporo-ação* – in-body-action) of ways of thinking, acting, being/existing that are no longer questioned by the individual, functioning as an “automatic” *the way*. This “de” conscientization process of ‘corporeal’ naturalization, as well demonstrated in the studies of several authors in recent decades, such as Pierre Bourdieu and Jean-Claude Passeron (1970), Michel Foucault (1969; 1971), and Paulo Freire (1987), presupposes that a previous process of ecophenomenological deconstruction of these naturalized structures is essential to suggesting change (Payne & Wattachow, 2009; Rodrigues, 2015c). So, a significant challenge for theorizing ecopedagogy emerges: the need for understanding that the concept of naturalization presumes a complete unawareness of the naturalized structure by the individual (incorporated habitus) or society (collective habitus). Put simply, how is it possible to question *some things* we are oblivious to, or “invisible from”?

Being (alive—Ingold, 2011) in nature critically calls for diversity of experiences; the “corporeal dissonance” of phenomenological deconstructions *in situ* (Payne, 2014) afforded by the material reconstruction of different interactions/incursions where ecomotricity is potentialized carries a prospective for action in a first “step” to responding ecopedagogically to the limits to change. Particular experiences demand an environmental design that allow/incite us to acknowledge uncritically treated and practiced (naturalized) issues in the ecopedagogical ways we relate to/with certain scapes in the world. Different ways of perceiving, through/in motricity, offers a continuous experimentation of our objective representations (of environment, nature, wild, and so on). The ecosomaesthetic~environmentally ethical~ecopolitical (Payne, 2015) implications of this are noteworthy (Payne uses tildes to signify the “immediately preceding nondualist intercorporeality, mutually constitutive “natures” and agential relations as an “ecology of things” for pedagogical, curriculum and research deliberation and development,” Payne, 2015, p. 16).

From this ecopedagogical vantage point, it inspires environmental educators, especially those concerned about the theory to practice gap (or mind-body), to “cultivate” experiences where ecomotricity in various environments can flourish, where environmental/experiential/immersive experiences are: diversified, thus stimulating corporeal dissonance contrasting the new and the already “known”; accessible, thus, just and stimulating of encounters in diversity; instigating, thus appealing to captivating the new and different; participatory, thus meaningful and filled with personal worth and value; generative, thus inspiring new seeds; somaesthetic, thus, holistic, deconstructing and reconstructing via our moving “whole bodies,” implying not just the mere reading of the word, but a being/doing reading of the world (Freire, 1996; Rodrigues, 2015c).

In the context of this example of (environmental education) research, another finding highlights the “correlation” between researcher and researched. The ecopedagogical co-construction indicated earlier is redefined here as a direct and generous relationship, including in its aesthetic and affective dimensions, deconstructing the idealism of a possible neutral relation between them. Opposing the principles of generalization and causal, factual realities (rationally constituted objectivity), singularities are claimed as significant and genuine ways of being-in-the-world (intercorporeal created ontology where the world is objectively constituted through perception).

In this perspective, paths are opened to methodologies that recognize the need to value and validate affective and aesthetic elements in research (Payne et al., *in press*), such as ecophenomenological methods and ethnographies in movement (mobile ethnographies—Porter et al., 2010; walking ethnographies —Ingold & Vergunst, 2008; Lorimer, 2011; Pink, Hubbard, O’Neill, & Radley, 2010; sensory ethnography—Pink, 2009; walking interview—Evans & Jones, 2011; shared walk—Lee & Ingold, 2007; commented walks—Winkler, 2002). Fully exposed, the researcher recognizes his ethical and political

role as an opinion maker, assuming the responsibilities of nonanonymity, presenting in full and committing himself to the results of his research, being open to frank dialogue, accepting criticism, and criticizing his pairs when necessary.

In the classroom—Environmentalizing, greening or green-washing the curriculum?

Considering ecopedagogical processes of curricular environmentalization, a slightly broader focus of the two studies of ecomotricity scoped above, a series of recent studies (Payne & Rodrigues, 2012; Rodrigues, 2015a; Rodrigues, 2012a; Rodrigues & Freitas, 2014; Rodrigues & Payne, 2017) demonstrate how difficult it is to surpass more easily institutionalized processes of greening the curriculum in reimagining and “restorying” an environmentalized curriculum. Rather than retelling the recommendations from the preceding studies, the “what next?” for ecopedagogy as/in movementscapes highlights a “real” and ongoing experiential account of practical efforts to environmentalize Physical Education curriculum and, possibly, ecopedagogies at the Federal University of Sergipe, an institutional place, territory, and “intellectualscape” I inhabit, or seek to reinhabit.

The initial “case” is the disciplinary unit “Physical Education and Environment.”

All the dynamics that constitute the structure of the unit are developed in groups. During the first module of the unit (number of classes in each module is flexible and sensitive to particular demands of the groups) is dedicated to dynamics in which individuals are encouraged to search for elements in their life experiences (“knowledge from lived experience” – Freire, 1996) that help them constitute their own meaning(s) of “nature”; to stimulate the dynamics and debates, nonscientific discourses/languages/expressions are used (artistic/aesthetic; multicultural; interdisciplinary; journalistic; virtual; popular), constantly challenging the groups to deconstruct and reconstruct their representations of “nature.” Only after each group has put together their concepts/representations of “nature,” a group of scientific articles are chosen (according to their potential to contest elements of the concepts fashioned by that specific group) to integrate the process of conceptualization, once again stimulating (de)(re) constructions in the groups’ preconceived “truths” and associated “jargons.”

The second module is dedicated to praxis and to contextualization, initially by the development of a “manifesto for sustainable life” elaborated in three stages: a) a written “manifesto of ideals”; b) a map of relations; and, c) a plan of/for action. The first step is the elaboration of the written “manifesto of ideals,” based on their synthesized concepts of nature and their imagined ideals towards sustainability in/with nature. The following step is creating a map of relations showing how the synthesized ideals are interconnected, challenging them to envision possibilities and limitations to their imagined, ideal scenarios. Finally, each group elaborates a local (neighborhood; city; state) plan of/for action based on their manifestos and maps of relations.

Having completed this second stage, where praxis is motivated by the conceptualization of ideals for practical contexts, praxis is also designed in contextualization experiences: a) field research that enable them to test their manifestos in practice—choosing different places of higher and lower potential towards ecomotricity, the groups collect data by direct observation and by interviewing in-context individuals; the observations and questions for the interviews are based on issues directly related to each groups manifesto; b) group experiences in nature—by collectively participating in experiences with a high potential towards ecomotricity, the groups are challenged to practically acknowledge scapes and limits to the proposed ideals of their manifestos; and, c) ecomotricity labs—the groups elaborate ecopedagogical workshops presented to the other groups within the unit; the proposed experiences (inspired mostly in games and in the arts) aim to provoke the participants in key points described as ideals in the manifestos; once again, scapes and limits to the proposed ideals of the manifestos are practically acknowledged. During this whole process of contextualization the groups can modify or incorporate new elements to the three parts of their manifesto, constantly confronting text and context.

Finally, the last module of the unit is dedicated to empowerment, in this case, by the representation and legitimation of the lived process and experientially constructed knowledge. The groups present the final versions of their manifestos (all three parts) in an open, public exposition where they can share

and dialogue about their experiences with other people, defending their constructed “truths” and being susceptible to questions, critics or simply different world views.

Once again, it becomes clear how time and immersion in this experimental and experiential “space” of environmentalizing the curriculum are highly relevant to the broader local and global processes of environmentalization. The case studies presented in the previous section involved individuals with regular experiences in nature (at least once a week in the last two years, being most participants engaged in these experiences for much longer than that), while most of the individuals that participate in the unit are dwelling in/with these experiences for the first time in their lives. It was also suggested in the previous section how certain properties of time are essential—slow; available; ludic; *Kairos*. The time shared with the groups in the disciplinary unit carries none of those attributes—it is a time of compulsory participation packed with academic commitments, all with chronological deadlines and pre-determined places to be and things to do. As for the results, even if the changes from the initial to the final conceptualizations of nature and elaborated manifestos are incredible, at the end they still clearly show the (discursive; conceptual) restraints of historically fashioned trends in experiences in nature and romanticized body-environment relations.

However (and this is not a small “however”), the most relevant ecopedagogical aspect of the shared experience during the semester long unit is not the visual/discursive changes in how nature is conceptualized, but the “cultivation” of new/different ways of moving in nature phenomenologically experienced in praxis. The constant and stimulating (de)(re)construction, continuously confronted by different “languages”/expressions, challenging possibilities and limits in praxis, interacting and intra-acting, being-with-others-in-the-environment, experiencing empowerment and exposure: the grander ecopedagogical feat is not clearly evident at the end of the road, but potentially awakened within generative corporeal dissonances.

In 2016, the Brazilian Federal Government instituted a mandatory curriculum review in all higher education teacher training programs. One of the emphasized elements in this review was the inclusion of a number of “transversal themes,” among them, environmental issues. In the reformulation of the Physical Education curriculum at UFS, led by a special committee which I was part of, environmental issues were inserted transversally in all academic units. An elective unit on “Recreation and Sport Experiences in Nature” will also be offered, in addition to the existing “Physical Education and Environment” unit. Research projects with an environmental bias offered by the Physical Education Department are also greatly important in creating a deeper association between the field of physical education and environmental issues. The “Ecomotricity in the state of Sergipe” project is an example. Another is the project I am currently coordinating on research methodologies for ecomotricity studies. In the near future we will be able to evaluate how effective these integrated efforts are on overcoming the challenges to curricular environmentalization.

Still in time

In synthesizing a movementScape as ecomotricity in ecopedagogy, some generic principles of practices are extracted. Demanding further empirical, theoretical and methodological insights (and evidence), these principles warrant consideration for potential transferability (not generalizability) to other practical contexts and different frameworks of inquiry.

- Conceptualizing a world of movement where meaning is essentially created in movementscapes. Ecophenomenologically, motricity is conceptualized as the decentered, intercorporeal immanent movement of existence that binds all living beings. Within this conception, the corporeal dissonances that flourish in ecomotricity experiences (ludic, ecological interaction with nature) have deep ecopedagogical inclinations and implications. Discussions on motricity need more ground in the academy; considerations about the ecomotricity of movement experiences in various scapes, as briefly sampled in this Special Issue, need more land/ground/food/water/oceans where motricity is already and always in existence. Considering the latter, ecomotricity will be the central theme in the VII Colloquium of Qualitative Research on Human Motricity, which will have the city of Aracaju (Brazil) as venue in October, 2017. A thematic special journal issue on ecomotricity is also being developed as a

result of the “Ecomotricity in the state of Sergipe” research project outlined above, collating manuscripts from 12 researchers from 9 different higher education institutions.

- Studying the history of social representations and built knowledge. Patterns of movement (in nature) are collectively constituted, conditioning ways of thinking and ways of doing and becoming. Learning about these patterns is essential to understanding the possibilities and limitations of (eco)pedagogical propositions and practices. A network of studies about the social representation of experiences in nature in different geo-cultural/historical contexts will make a significant contribution, as well as public representation and legitimization, towards (re)thinking ecopedagogical possibilities in movementscapes.
- “Going to the thing itself,” learning from/with those that experience the phenomenon. A fundamental concept of transcendental and intersubjective phenomenology, recast here as immanent and intercorporeal ecophenomenology, especially, through ethnographies in movement as ecologies of beings and things. The incorporation of an ecophenomenology of “lived” movement in various environments and their scapes into an emergent notion and practice of ecopedagogy in a range of settings, in different modes such as education, tourism, health promotion, and open space, urban, and natural environments is viewed here as potentially significant in responding to some of the ontological limits to the Cartesian inspired epistemologies of disembodied, non intercorporeal presumed rational change (Fay, 1987), too often uncritically invoked in pedagogical efforts to “change” body-nature relations, or promote allegedly “pro-environmental behaviors.” Having the “Ecomotricity in the state of Sergipe” research project as a pilot, other studies that investigate fundamental aspects of how ecomotricity is experienced in different geo-cultural/historical contexts (local/regional particularities; regional/global trends) might offer important contrasts to substantiate conceptual, empirical, and methodological insights.
- Integrating ecopedagogies in movementscapes to curriculum practices. Isolated efforts towards curricular environmentalization are not effective, as they reinforce a peripheral inclination of environmental issues. Centrality is key to processes of environmentalization (legitimation; incorporation), which can only be achieved through an integrated framework of actions. Where diversity of pedagogical strategies and resources is valuable, ecomotricity challenges the traditional formality of the classroom. As examples of more integrated frameworks start to appear, including those where movementscapes are in play, such as the account on the curricular structure of the Physical Education course at UFS, periodic analytical and critical reviews are precious to the continuing development of curricular environmentalization processes.
- The essentiality of time (slow, available, ludic, *Kairos*) and immersion (intercorporeal, in movement, *Chora*), conditions rarely satisfied yet in ecopedagogical propositions for practice in various scapes, and educational/curricular disciplines. Potential (inter)corporeal dissonances resulting from prompt, sporadic experiences in/with/about nature can lead to stimulating and even generative affects/effects on human-nature relations. However, significant ecosomaesthetic-environmentally ethical-ecopolitical shifts in individual and collective habitus of movement require a specific kind of relation in/to time and space, as discussed in the practical accounts above. Specific methodological frameworks need to be developed through thinking about these particularities, a fruitful ground for research in environmental education and ecopedagogy. The account on the “Ecomotricity in the state of Sergipe” research project is an example of slow, committed, multilinguistic, in movement research on ecomotricity, a framework currently being used by a number of students from UFS in their final undergraduate projects (monographs). Movementscapes are also the focus of a new research project from the Physical Education Department at UFS, having as main objective the development of mobile studies in ecomotricity.

The practical accounts presented in this manuscript have a particular geo-epistemological ground/ emplacement in selected sites in Brazil, thus presenting potential limitations when contrasted with other geo-cultural/historical settings. Indeed, different people (age, ability, capacity, gender, culture, environment) move in different ways, and ecomotricity varies for numerous human and other-than-human reasons, sources, and affordances, including the environments in which movement is “accessible.” Limitations thus considered and requiring much more attention, the synthesis presented above

suggests a “startup” contribution for ecopedagogues and methodologists who aim to critically engage in (social/curricular/professional/research) projects that involve movementscapes, as well as academics interested in questioning how ecomotricity might potentially challenge different fields of knowledge and practice.

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