Balancing the Warrior and the Empathic Activist: The Role of the Transgressive Researcher in Environmental Education

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Abstract

This paper explores the complex relationship between environmental education and researcher activism from the perspective of transgressive learning. With increasing interest within academia for more radical learning-based transformations for confronting sustainability challenges, come calls for more instrumental warrior stances in methodologies and research fields so as to more aggressively change ingrained unsustainable behaviour at the societal level. At the same time, in an increasingly polarized and unstable world, there is also a desire for more empathic learning approaches so as to build critical thinking and empowerment at the grassroots level through emancipatory learning. Based on case study research of a Colombian network of sustainability initiatives, this paper argues that key capacities of reflection, empathy, and courage are imperative in order for the transgressive researcher to address deep-seated socio-ecological challenges.

Résumé

Nous explorons le rapport complexe entre l'éducation à l'environnement et l'activisme scientifique dans une optique d'apprentissage transgressif. À l'heure où les milieux universitaires s'intéressent de plus en plus au développement durable et au besoin de transformations radicales reposant sur l'apprentissage, on s'attend à voir des prises de position plus *militantes dans les secteurs de la recherche et de la méthodologie, pour combattre avec plus d'acharnement les habitudes sociales qui, bien que profondément ancrées, vont à l'encontre d'une vision durable. Par ailleurs, malgré l'instabilité et la polarisation croissantes, on remarque* un élan pour les approches plutôt axées sur *l'empathie et développant l'esprit critique et l'autonomisation citoyenne par des expériences d'apprentissage émancipatrices. Les auteurs s'appuient sur des études de cas issus d'un réseau colombien d'initiatives de développement durable pour faire valoir comment le chercheur désirant transgresser le statu quo et s'atteler aux problèmes socioécologiques profonds doit impérativement savoir faire preuve de réflexion, d'empathie et de courage.*

Keywords: Transgressive learning, Environmental Education, Colombia, Activism

An introduction to learning and the status quo of sustainability

The status quo is nowhere more evident than in current sustainability debates. In times of global systemic dysfunction and impending ecological collapse, real change appears elusive. Quick fix technological innovations grab the headlines, while calls for fundamental changes to values and habits are met with institutional feet-dragging. Yet the fabled *Silent Spring* of Rachel Carson (1962) seems just around the corner. Every day, in a country such as Colombia, we hear about new species dying out, tracts of native forest and cultural sites ravaged by mega-mining and Indigenous rights violated (Calderón Sánchez, 2008). Perhaps more worrying than the silencing of Indigenous peoples and birds is the creeping realization that climate change—exacerbated by certain lifestyles—is making our planet increasingly uninhabitable not just for certain wildlife, but also for humanity. The further we consume our way into the Anthropocene—the epochal age of human induced climate change (Steffen et al., 2011)—the greater the danger that we burn the ecological bridges which connect us to the web of life.

Not long after Carson's *Silent Spring* roiled readerships worldwide, the field of Environmental Education (EE) emerged as a response to environmental concerns such as the impact of chemical pesticides. Initially based on raising awareness and understanding about environmental values and behaviour (mainly in Northern discourse), the field has developed to incorporate political, social, cultural, economic, and gender-based considerations (Korteweg & Russell, 2012; Martusewicz, 2015; Peters & Wals, 2016; Sauvé, 2005; Wals, Geerling-Eijff, Hubeek, van der Kroon, & Vader, 2008; Wals, 2011). Although EE in higher education is steadily gaining traction in countries in the global South such as Colombia (Barraza, Duque-Aristiza, & Rebolledo, 2003), it is the political branches of EE which have found especially fertile ground in environmental thinking and action. From the call for "soil, not oil" by Indian environmental activist Vandava Shiva in her book of the same name (2015), to the demands of the Indigenous Zapatistas in southern Mexico for a "world where all worlds fit" (Shenker, 2012, p. 432), grassroots social movements that are deeply committed to environmental concerns are flourishing.

Alongside advancements in grassroots environmental activism are interesting developments in state level discourses in terms of group world views on the environment. Latin America is what Escobar (2010) describes as "the only region in the world where some counter hegemonic processes of importance might be taking place at the level of the State at present" (Escobar, 2010, p. 1). In a bold institutional move, Ecuador amended its constitution in 2008 to declare the rights of nature. The following year, Bolivia declared itself a plurinational state, thus recognizing the coexistence of various nationalities within its borders (Gudynas, 2011). Both constitutional amendments are affronts to modern paradigms of development, and are inspired by the emerging concept of *buen vivir* (roughly translated as *the good life*), which represents more

biocentric, communal and relational means of understanding and being in the world (Chaves, Macintyre, Verschoor, & Wals, 2017a).

What is becoming increasingly clear, however, is that providing information, raising awareness, or even institutionalizing nature rights is not enough to facilitate any major changes in human behaviour: There is a recognized gap between the stated desires/values of people and their everyday behaviour (Glasser, 2007). This can be seen in consumers' daily actions; for example, they may "green the world" through recycling, but they nevertheless fail to question some of their more fundamental (over-)consumptive habits. This gap is also evident at the state level, where despite the Ecuadorian constitution declaring the rights of nature, the government's recent approval of a mining law and the proposal of a water law arguably contradict the principles of *buen vivir* by placing economic development over the rights of nature (Walsh, 2010).

Closing the gap between value and action is an important aspect of EE, and a fundamental consideration is the *types* of learning that are most effective in addressing current sustainability challenges. On one side are instrumental approaches based on changing human behaviour through, for example, education and government regulation. In a context of planetary upheaval, and societies' resistance to change, it is argued that we must use all available tools and means to change human behaviour before it is too late. On the other side are more emancipatory approaches which argue that societal members need to understand the system they are part of in order to be able to change it. Instead of the government or educational system taking the role of moving society towards predestined directions, the goal should be for educators to develop capacities for critical engagement with people, encouraging individuals to more actively reflect on actions and assumptions which maintain the status quo. This would facilitate personal and collective change (human development) within one's own socio-ecological context.

In environmental education, both approaches are used and can be combined, depending on what type of change is needed and desired (Wals et al., 2008). Yet as learning specialist Arjen Wals notes, "deeper and more fundamental societal change will be more sustainable than quick fixes, short-term thinking and a focus on behavior without consideration of the deeper issues and values" (Peters & Wals, 2016, p. 183). Although instrumental approaches may well be needed to guide societies in a predefined direction, education promoting emancipatory learning has the potential to lead to a critical citizenry, one which questions basic assumptions. This in turn may lead to a greater planetary consciousness.

Environmental activism and the "transgressive" researcher

Addressing the deeper and more fundamental societal change mentioned above is the focus of this paper, in which we argue the researcher plays an important

role as an environmental activist. A typical definition of environmental activism is "organized participation in environmental issues, comprising an example of environmentally friendly behavior rooted in the political realm" (Marquart-Pyatt, 2012, p. 684). Despite the friendly wording of this definition, activism is a loaded term; depending on our assumptions and affiliations—influenced by the media, grassroots organizations, and academia—environmental activism can spark enthusiasm or repulsion. Yet, while environmental activism has traditionally been associated with engagements at the international level—think Greenpeace activists boarding a whaling ship—there is an increasing recognition within academic and activist circles that environmental activism has a much broader political character (Wapner, 1995). Such a spectrum of environmental activism encompasses an extreme range of actions: from dismantling the industrial economy through concerted attacks on industrial infrastructure (Jensen, McBay, & Keith, 2011), to community garden initiatives in the Bronx (Krasny & Tidball, 2012), and even to the simple act of defiance against consumerism by living a low impact lifestyle (Chaves, Macintyre, Riano, Calero, & Wals 2015).

Based on the recognition that environmental activism is inherently value-based, we will explore the tensions involved in competing values through the two emotive approaches of the *warrior* and *empathic* activist. Employing the term *warrior* evokes different feelings in people depending on cultural context. Some Indigenous understandings, for example, highlight the deeply spiritual nature of the term. Alfred and Lowe note the English-Kanien'kehaka translation of the word warrior—*rotiskenhrakete*—literally means "carrying the burden of peace" of the Indigenous Kanien'kehá:ka/ Mohawk peoples of North America (2005, p. 5). This definition starkly contrasts those that emphasize the warrior's qualities of power and strength that are apparent in Western dominant activism. The rubber dingy filled with black-clothed activists racing to cut off a whaling ship is a good example of the against-the-odds "fight"— raising short-term public awareness of an environmental issue. We can understand the Western approach to activism, replete with a touch of hubris, as taking the side of more instrumental approaches to learning as it seeks to change behaviour through predetermined ideas of what is right or wrong. It is in this Western sense that we will use the term warrior in this paper.

By contrast is the *empathic* approach to activism, characterized by qualities of care, nurture and empathy, and perhaps tinged with a shade of naivety. A good example of empathic activism can be found in the Salt March of 1961, led by Mohandas Gandhi, whose non-violent, symbolic opposition to the British crown galvanized India's resistance movement. Such activism has the potential to change perceptions in societies about what is possible or not (in this case, defying the British Crown), whereby the ability for the masses to connect with a cause can lead to a more emancipatory approach to activism and learning.

It is important to note that both warrior and empathic approaches are useful and valid in particular contexts: after generating international awareness to

India's fight for independence, Gandhi then had to sit down at the negotiation table with instrumental demands for the British. The question we want to address in this paper is: *how,* in the context of sustainability challenges, do these approaches generate tensions and contradictions in the researcher and subject, especially in terms of addressing sensitive topics such Indigenous rights, sustainable lifestyles and, ultimately, world views and ontologies?

The rest of the paper is structured around five characteristics of the emerging concept of transgressive learning, which we will use as a means of addressing the question that closed the previous paragraph. This will be explored via case-based studies and experiences from four years of research into a Colombian network of sustainable initiatives called CASA (The Council of Sustainable Settlements of Latin America). The respective characteristics representing each section are as follows:

1. Ethics of transgressive learning is based on a philosophy of caring which balances the *warrior* stance of activism with the *empathic* pose of vulnerability.
2. Transgressive learning, based on disrupting structural hegemonies of power, is a form of transformative learning.
3. Transgressive learning addresses *wicked* sustainability issues characterized by their complex, fluid, and transient nature.
4. Transgressive learning as a methodology is normative and characterized by "ecologies of knowledge."
5. With their emphasis on participatory, reflective and narrative approaches, transgressive methods are performative by nature.

Within each section, we will describe the characteristic, place it within current research in Colombia and discuss the role of reflection, empathy, and courage, in what we describe as essential aspects of the transgressive researcher. We will conclude this paper with some final remarks on what a not-so-silent spring may look like for all of us.

Characteristic 1 - Ethics of transgressive learning are based on a philosophy of caring which balances the warrior stance of activism with the empathic pose of vulnerability.

Change seems to be the talk of the town. After millions of years of incremental geological changes—with glaciers emerging and receding, and continents meandering across the seas—the human footprint is dramatically affecting the rate of change on Planet Earth. The sheer extent of this footprint is not only accelerating human progress, but also hastening planetary changes, ushering in what some are labelling the new geological epoch of the Anthropocene (Steffen et al., 2011). The advent of the so-called Anthropocene raises profound ethical

questions about humanity's relationship to the natural world, and how we should move into the future (Hourdequin, 2013).

This is especially true when taking an advocacy approach to, and participatory stance on, research—when trying to give research subjects a political voice and facilitate and promote positive changes in their lives. Researchers must ask themselves, do we do this through an empathic pose? In other words, do we take the form of a reflexive and sensitive practitioner who is *empathically* versed in engaged practice - an approach that is able to facilitate participative parity within social learning spaces that are often aimed towards the sensitive areas of justice and emancipation (McGarry, 2014)? Or, do we instead risk tension and conflict by questioning and challenging what we see around us? In other words, do we take a *warrior* stance following the dissonance and seek opportunities for personal transformation and even collective transgressive learning (Chaves et al., 2016)?

Before adopting an activist role, one must consider the fundamental ethical responsibility of the researcher to "do-no-harm." For how can we break hegemonies of power without causing tension and conflict between and within the people and communities we study? For example, when searching for an interesting topic of research, the second author of this paper clearly remembers the suggestion of her supervisor: "Go where the conflict is!" And indeed, this present research has found that conflict and dissonance are fruitful avenues for exploring disruptive pathways that lead to transformative and transgressive learning-based change. In the words of co-researcher Jorge Calero, "transformative fires" maintain the activities of the community dynamic (Chaves et al., 2015, p. 29). Yet how can we square such a *warrior* attitude with a planetary need for cultural and ecological reconciliation?

Addressing this dilemma, McGarry et al. (2016) have put forward the idea of expanding moral action to move beyond "do-no-harm" and towards a practice of care. Through positioning the researcher as a "reflexive justice practitioner" (Kulundu, 2012), and an "empathetic apprentice" (McGarry, 2014), an ethical framework based on the practice of care situates moral action and ethics as an ongoing dynamic relationship between the researcher and actors—both human and non-human. In practice, this ongoing relationship demands substantial reflection by the transgressive researcher. A fundamental (though disconcerting) consideration is whether the researcher is addressing the problem, or is part of the problem itself. Paraphrasing David Orr, the people with the biggest ecological footprints are not the ones who received no formal education and are living in poverty but are the ones with undergraduate and graduate degrees (Stone & Barlow, 2005). As educated researchers, we have both a comparatively high awareness about sustainable development and a highly unsustainable lifestyle that is at odds with intergenerational global, social, and environmental justice.

As a means of addressing this ethical paradox, the authors of this paper lived among the members of the ecovillage Atlántida, located in southern Colombia (see

Chaves et al., 2015), joining them in a life characterized by voluntary simplicity. In a small, 12-square meter house with a dry toilet, situated in a stunning rural setting and embedded in a community fabric of chores and celebrations, we tried to live a form of *buen vivir*—a life connected to the natural world—leaving as small a footprint as possible. Despite temperamental electricity, mediocre internet, and infuriating outbreaks of lice, we managed to create a life in spite of community turmoil. But consistent with the wicked nature of sustainability challenges, our situation changed as new factors emerged, thus rendering this life untenable for us. These lived and embodied experiences, however, proved invaluable for highlighting the importance of having the courage to step off the beaten path, confront other ways of living and being, and put into practice being a critical, reflexive and engaged transgressive researcher.

Characteristic 2 - Transgressive learning, based on disrupting structural hegemonies of power, is a form of transformative learning.

At the conceptual level, the surging awareness of the damage humans are doing to our ecological home, and the need to do something about it, has led to increasing discourses of transition (Escobar, 2015). A popular example of a collective transition discourse is that of transition culture, based on the empowerment of grassroots communities to address peak oil and energy use (Haxeltine & Seyfang, 2009; Hopkins, 2008). In research policy, this has been framed as socio-technical transitions (Geels, 2010) which notes that sustainability is difficult to achieve because of lock-in mechanisms that maintain poverty and social injustices; it posits that radical sustainability innovations instead occur in niches. At the individual level, there is also an increasingly strong focus on personal growth, empowerment and self-help literature, which from a learning perspective, is encapsulated by the theory of transformative learning. With a frequent focus on cognitive and personal change, this theory promotes the importance of transformations in beliefs, values and points of reference (Mezirow, 1997).

Building on the numerous “T” terms of "Transition," "Transformation" and "Transgression," is the research project titled “Transgressive Social Learning for Social-Ecological Sustainability in Times of Change” (referred to as the T-Learning project). Funded by the International Social Science Council, this international multi-case study project aims to investigate the “emergence and qualities of transformative, transgressive learning processes and their role and contribution to sustainability transformations at the food-water-energy-climate-social justice nexus” (Lotz-Sisitka et al., 2016, p. 53). This project is based on the recognition of the important roles of education and learning in leading human development and societal transformations (Engeström & Sannino, 2010); it is also rooted in a belief in the importance of more radical forms of learning-centred transformation (Wals, 2007), which, as the Intergovernmental Panel on Climate Change (IPCC) (2014) reports, is strongly needed for climate change adaptation.

Characterized as a form of transformative learning that addresses structural

forms of power, transgressive learning is a "concept in construction" based on exploring the *types* of radical learning that have the potential to disrupt ingrained norms of unsustainability (Lotz-Sisitka et al., 2016). As one of nine case studies from around the world, the aim of the Colombian case study is to explore the stream of transgressive learning characterized by new social movements, post-colonial and decolonization theory. It builds on the authors' investigation into the sustainability network CASA Colombia (CASA, 2016), an intercultural organization made up of ecovillages, Hare Krishna devotees, Indigenous communities, and urban professionals. CASA is actively working to create intercultural learning spaces, where shared sustainability challenges such as mega-mining, food sovereignty, and territorial defense are addressed.

An inherent tension in this research has been between the "aggressive" nature of transgressive learning—confronting basic assumptions of inequality and environmental degradation in society—and the need for understanding and respect for other worldviews and realities. As a form of collective learning, transgressive approaches require substantial reflection on what structures should be disrupted, how learning can contribute to such disruption and, importantly, the consequences for people and the environment of changing the status quo. For although it takes courage to confront the system, empathy is also vital for recognizing that even if disruptions may be necessary, they will always involve uncertainty and pain for those who are not ready to change.

Characteristic 3 - Transgressive learning addresses wicked sustainability issues characterized by their complex, fluid and transient nature.

The uncertainty referenced in the previous paragraph has led policy makers and academics to employ the term "wicked" to describe the quagmire of the sustainability concept (Australian Public Service Commission, 2007; Krasny, 2013). Rather than single, all-encompassing solutions to resolving sustainability challenges (for instance, technological development), there is an increasing understanding within sustainability circles that multiple perspectives and types of knowledge, worldviews and strategies are needed to address interconnected nexus challenges such as food sovereignty, social justice, water and energy needs.

The complex nature of wicked sustainability challenges suggests that a routine problem solving approach is insufficient, as the effort to reduce the problems of the world into smaller, manageable chunks negates the interconnected nature of the world. Instead, it is argued, we need more systemic and reflexive ways of understanding our ever-changing environment. Wals et al. (2008) note, however, that critics of such an emancipatory view argue that we already have a good idea of what is sustainable or not, and by the time we have all gone through the process of self-emancipation, it will be too late.

Our research has shown that although society may have a somewhat shared understanding of what is sustainable at a discourse level, day-to-day realities in

situated contexts are far more nuanced. Research into the ecovillage Atlántida—a member initiative of the network CASA—has shown that even in a seemingly homogenous community of people intentionally living together to fulfil shared visions of sustainability, tensions and dissonance were generated over time on account of differences in worldviews, work rhythms and sexual practices (Chaves et al., 2015). From a flourishing community of over 20 people, this community ultimately collapsed. Through collective reflection sessions, remaining residents acknowledged that their original visions of living a communal and harmonious life had changed over the years, and due to a lack of communication and emotional management, these differences had unwoven the social fabric of the community.

From a researcher perspective, it was enlightening (though tough) to research and be part of the Atlántida community. On one side was the strong *warrior* feeling of being part of a community outside of mainstream norms and society. We were activists, courageously fighting the system not only through talking, but also through walking the path of sustainable living. Such resistance to modern conventions involved relearning how to live with the cycles of nature, and opening oneself up to processes of personal growth and spirituality. It also involved the fickle challenges of living *together* with people in a community—of confronting the dominant narrative of individuality. Although romantic at times, this *warrior* approach proved problematic. Like the example of the Greenpeace activists up against a giant whaling ship—of David versus Goliath—this type of activism reinforce the dominant divide between *warrior* activists and the population at large.

In many ways, communities such as the ecovillage Atlántida represent an ideal, though unattainable, way of living in harmony with Mother Earth. The experiment of the ecovillage Gaviotas, in the eastern savannas of Colombia, further demonstrates the challenges of such initiatives. Gaviotas comprises a group of engineers and scientists who have attempted to create a model of sustainable living (Weisman, 1998). Despite multiple innovations such as hand pumps capable of tapping deep sources of water, and a massive reforestation project, maintaining a long-term community in the face of complicated political and social realities has proven difficult, and Gaviotas constantly faces an uncertain future.

Rather than fighting the system, our experiences have demonstrated the importance of empathic forms of activism, whereby sustainability is viewed as a process-oriented negotiation between ways of being in the world. Although a "sustainable ecovillage" sounds powerful in a report, we consider it impossible in practice. What appears more attainable are the capacities of critical self-reflection, as well as the ability to empathize with fellow human and non-human actors. To the transgressive researcher, such decolonial perspectives place a great focus on experiential learning, where ethical engagement and theoretical stances are embodied in practice (Bhaskar, 1993). With respect to experiential

and process based learning, we thus need to be careful not to label initiatives such as the community Atlántida and Gaviotas as "failed." Although the original community of Atlántida collapsed, such experimental spaces are an inspiration to many people who visit and live for periods of time in these communities, such as the authors of this paper. In the case of Atlántida, new people are moving to the community with new ideas and skills, demonstrating an organic process of death and rebirth.

Characteristic 4 - Transgressive learning methodology is normative and characterized by "ecologies of knowledge."

Building on the need for multiple perspectives and types of knowledge, the T-Learning project is co-designed (Lotz-Sisitka et al., 2016). It seeks to explore transgressive learning *in situ* across cultural contexts. Methodologies focus on transdisciplinary research, with an emphasis on boundary-crossing academic, civil society, government and even non-human realms (Akkerman & Bakker, 2011). Its epistemological basis is on "ecologies of knowledge" (Sousa Santos, 2011), which focus on establishing cognitive justice between modern and non-modern worlds. The general goal is generating and contributing to new or marginalized narratives of sustainable good lives. Such narratives have the potential to represent innovative "keys" for helping to unlock the nexus challenges mentioned earlier in this paper. In this way, transgressive learning is explicitly normative—it challenges taken-for-granted social norms.

In this section we discuss the ontological aspect of activism arising out of the Colombian case study. As noted by Lotz-Sisitka (2009), ontology plays an important role in EE, influencing how and why we come to particular forms of research. It also provides a reflexive referent for our epistemic endeavours, i.e., it helps us to understand that our *thoughts* about being may not always be the same as *actually* being. This is significant for the activist researcher because it brings into sharp focus the oftentimes epistemic and ontological disjunctions of politics, forcing us to consider the meaning of ontological politics anew, i.e., compelling us to examine the politics of being. Moore (2015, p. 9) proposes that ontological politics of modern world history may be typically and incorrectly cast as "a history of relations with environmental consequences." Through review of four decades of environmental thought, Moore proposes to counter this, suggesting that a new framing of such politics is possible : "modernity does not only act *upon* nature, but develops *through* the web of life" (p. 9). The object of modern crisis is therefore "a relation of organising and reproducing life, power and capital"—all of our activity *is* "environment making" (p. 9).

The methodological considerations of the performativity of ontological politics became apparent through the authors' active participation in the 2015 gathering of the CASA network called *El Llamado de la Montaña* (The Call of the Mountain). This took place in the Indigenous University of Misak in the southern

Colombian territory of Guambía. Central to the cosmology of the Misak people is the notion that the territory is alive—that it is living and breathing. Living a *buen vivir* means harmonizing relations between territory, the community and oneself. Many participants of this intercultural event were challenged by such an ontology, instead embracing a more modern ontology—one that is far removed from daily relations to spirits, territory, and energy levels. To demonstrate these otherworldly encounters, we provide a narrative of the harmonization ritual the Misak medicine men conducted to cleanse participants for the territory:

> Late in the afternoon, the cleansing of participants was programed. Participants were asked to sit in a horizontal line behind a group of medicine men who were "speaking" to the territory. Without explanation, people accepted the situation and waited for something to happen. After two hours nothing had "happened." The medicine men stood gazing out into the mountains, whispering softly to the wind, while participants began to feel cold, tired and bored...Eventually a thick mist began descending from the mountains enveloping everyone, further decreasing the temperature and silencing the singing. Many participants, tired and cold, started leaving for their tents. At last, a medicine man explained that the mist was the actual cleansing. He brushed each person front and back with a branch soaked in water infused with medicinal plants. The ritual was over; the remaining people stumbled back to their tents in the dark, some confused, some contented, and most just ready for bed. (Chaves, Macintyre, Verschoor, & Wals, 2017b, p. 7)

As Moore (2015) points out, the translation of the philosophical position that being in the world is an environment-making process requires care and development in terms of methodological premises, narrative strategies and theoretical frames. The above narrative demonstrates some of these considerations for the transgressive researcher. First, the premise that there are "other" worlds—in what some academics describe as the "pluriverse" (see Escobar, 2011)—demands the researcher to remain open-minded, accepting that although we may not be able to "see" or understand other worlds, they still exist. This may sound poetic, but as the anecdote demonstrates, there are politics in these encounters which are not always so comfortable or understandable. A *warrior* approach to investigating these other ontologies, and judging them, risks the reflexive pitfalls of thinking that we actually understand them. Perhaps more useful, though much less definite, is a more *empathic* approach, which requires a relational, critical and transgressive style of ontological politics. This is emergent in a type of research that is experiential and reflexive as an environment-making process in the web of life. Sometimes, as researchers, we need to have the courage to sit back and acknowledge that we do not understand what is happening; we need to accept that we are part of the web of meaning being performed by a multitude of actors, of which humans only make up a very small part.

Characteristic 5 - With their emphasis on participatory, reflective, and narrative approaches, transgressive methods are performative by nature.

A recurring theme in the sections above is the notion that social life is performative, or "environment-making," as Moore (2015) describes it. This complements the increasing skepticism in the postmodern world regarding the objectivity of the researcher, the generalization of knowledge claims, and the naive realist agendas where the researcher is put above the subject and the method is prioritized over the subject matter (Spry, 2001). This is nowhere more clear than in the field of methods, where authors such as Law (2004) argue that methods do not just describe social realities, but help make them. This highlights the *performativity* of the researcher, where, through our researcher narratives, we are producing storied performativity (Blaser, 2014).

Method deals with how the researcher goes about collecting the information which constructs these stories. In this respect, knowledge co-production is an important aspect of the T-Learning project—and not just as co-designed research, but also in terms of creating knowledge *together* with research subjects. In the Colombian case study in Atlántida, we embraced Participatory Action Research (PAR) so as to become part of the social lives of the study. Beyond action research as a method, Fals Borda (2006) emphasizes the added participatory involvement of the researcher in what he describes as "praxis-inspired commitment," whereby the researcher goes through a process of decolonization from the dominant expert-based institutional logic, and assists intellectual and political movements for people's self-reliance and empowerment.

In the case of Atlántida, we attempted to adopt this method through joining the community as residents and partaking in active decision making processes, while at the same time upholding our role as researchers. An important result of this approach was the willingness of two of the residents to become co-researchers. These community members wrote reflections on their life in the community, one of them conducted interviews with other community members, and both contributed as co-authors to the publication of a peer-reviewed article (Chaves et al., 2015). This was rewarding to us as researchers, as it provided a real means of including the community members in the knowledge we were generating. However, in line with what Gottlieb (1995) and Maxey (1999) note, research collaboration is problematic in practice and in terms of representation. Apart from the challenges of one of the co-researchers not speaking English, which necessitated much document translation, a fundamental question was the extent to which the end product of the journal article represented the views of the co-researchers. The written reflections by the co-researchers had to be woven into the article, with changes in translation as well as content resulting as word limits had to be respected and main arguments refined. One co-researcher was skeptical about whether the changes maintained her intended meaning, and she communicated feelings of disappointment about having her words bent to fit the article. The two lead authors sat down with the co-researcher, listened

to her concerns, and explained how her ideas and written words had been incorporated to support the main argument of the paper. Small changes suggested by the co-researcher were then made to the manuscript to reflect some of these concerns. Conversely, the other co-researcher displayed little interest in the representational process.

The representational process highlights the tensions inherent in the beautiful concept of "knowledge co-production." Breaking with the objective expert as the sole owner of knowledge, more horizontal forms of knowledge production have a strongly activist feel about them, suggesting empowerment and emancipation for often marginalized groups in a society. It is important to remember, though, that research and social life are inherently performative, which means they are also political because of the power relations they enact. The presence of power relations demands the strong ethical consideration that if we are influencing specific events through *what* and *how* we research, then we have a responsibility to help create the realities we want to realize. Acknowledging these power structures and responsibilities takes courage and demands reflection on the part of the transgressive researcher. It inherently involves balancing the fine line between disrupting ingrained unsustainable habits and caring for the relationships that give meaning and happiness to our lives.

Conclusion: a not so silent spring

The greatest challenge facing humanity is taking responsibility for the way we are treating Mother Earth. In many ways, those arguing for a more *warrior* stance to learning are correct when they say that most of us know that our lifestyles are unsustainable, and that we are running out of time. We *are* running out of time, and although emancipatory approaches to empathic learning appear to be more just and liberating, there appears to be a good chance that it will be "too little too late." On the other hand, history has shown the tyranny of fear-induced power, and the prospects of an eco-totalitarian regime are not for the faint hearted—massive programs of "rewilding," for example, where people are contained in mammoth techno-cities (happy or not), while nature is left to *be* nature (Brand, 2010).

This paper has dealt with the importance of reflection, empathy and courage in the transgressive researcher so as to better understand and *act* within the complex dynamics of current socio-ecological challenges. Yet, as we have attempted to demonstrate, we are *all* activists in that we shape and perform the world in our everyday actions. As a collection of activists, we have, however, reached a turning point in our history where we have to make a change to survive. If we do not make these profound and surely painful changes to our habits—if we do not learn from our mistakes—then perhaps the following spring will *not* be so silent.

In his book titled *The world without us*, Alan Weisman (2008) provides an

account of a world where dampness and frost are breaking up the concrete jungle of New York. Seeds blow in with the wind, finding space in crooks and crannies, sprouting in newly forming humus, and growing into trees. Coyotes, wolves and bears re-enter the city. Slowly but surely, Nature, with all its noise and charm, will reclaim the domains which humans temporarily inhabited, but in which they are now no longer a part. This is a surreal image, and on one level it is a little sad. On another level, however, one can accept that this is just the way Nature works. This is the web of life taking its natural course—one in which our time as a species has come to an end.

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