

Body, nature and multispecies: a deep ecology perspective on sensory experience in wounded natural landscapes¹

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ABSTRACT

This article explores how direct experience in natural landscapes reconfigures self-perception and activates a deep reconnection with the living world. It seeks to analyze how these lived connections enable us to disrupt insensitivity in the face of the ecological crisis and foster an embodied ecological consciousness. To this end, we adopt a qualitative, theoretical-phenomenological methodology, combining a literature review with lived field narratives in Brumadinho, Minas Gerais – a territory affected by an ecocide. In light of deep ecology, the phenomenology of the body, and multispecies assemblages, we examine how direct contact with these environments fosters identification, somatic learning, and interspecies responsibility. The results indicate that a sensitive perception of the environment inspires ethical-political actions in defence of the planet. In conclusion, an ecosophical education grounded in bodily experience and art constitutes a key transformative path for rebuilding our relationship with nature through an active and committed sensitivity.

KEYWORDS: Deep ecology. Embodiment. Multispecies assemblage. Phenomenology. Ecosophy.

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Corpo, natureza e multiespécies: uma perspectiva de ecologia profunda sobre a experiência sensorial em paisagens naturais feridas

RESUMO

Este artigo explora como a experiência direta em paisagens naturais reconfigura a percepção do eu e ativa uma conexão profunda com o mundo vivo. Busca-se analisar como esses vínculos vividos permitem romper com a insensibilidade diante da crise ecológica e promovem uma consciência ecológica incorporada. Para isso, adotamos uma metodologia qualitativa, de base teórico-fenomenológica, que combina revisão bibliográfica com narrativas de campo vivenciadas em Brumadinho, Minas Gerais, território marcado por um ecocídio. À luz da ecologia profunda, da fenomenologia do corpo e das assembleias multiespécies, analisamos como o contato direto com esses ambientes propicia identificação, aprendizagem somática e responsabilidade interespécies. Os resultados indicam que a percepção sensível do ambiente inspira ações ético-políticas em defesa do planeta. Concluimos que uma educação ecosófica, ancorada na experiência corporal e na arte, constitui uma via transformadora essencial para reconstruir nossa relação com a natureza a partir de uma sensibilidade ativa e comprometida.

PALAVRAS-CHAVE: Ecologia profunda. Corporeidade. Encontro multiespécies. Fenomenologia. Ecosofia.

Cuerpo, naturaleza y multiespecies: una perspectiva de ecología profunda sobre la experiencia sensorial en paisajes naturales heridos

RESUMEN

Este artículo explora cómo la experiencia directa de paisajes naturales reconfigura la percepción del yo y activa una reconexión profunda con el mundo vivo. Se busca analizar cómo estos vínculos vividos permiten desactivar la insensibilización frente a la crisis ecológica y fomentan una conciencia ecológica encarnada. Para ello, adoptamos una metodología cualitativa, teórico-fenomenológica, que combina revisión bibliográfica con narrativas de campo obtenidas en Brumadinho (Minas Gerais, Brasil), escenario de un ecocidio. A la luz de la ecología profunda, la fenomenología del cuerpo y los ensamblajes multiespecie, analizamos cómo el contacto

directo con estos entornos propicia identificación, aprendizaje somático y responsabilidad interespecie. Los resultados muestran que la percepción sensible del entorno inspira acciones ético-políticas en defensa del planeta. En conclusión, una educación ecosófica basada en el cuerpo y el arte constituye una vía transformadora clave para reconstruir nuestra relación con la naturaleza desde una sensibilidad activa y comprometida.

PALABRAS CLAVE: Ecología profunda. Corporeidad. Ensamblaje multiespecie. Fenomenología. Ecosofía.

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Introduction

In recent years, within a context of an unprecedented ecological crisis marked by accelerated climate change, biodiversity loss and ecosystem degradation, concern about the growing disconnection between human beings and nature has increased significantly. Intense urbanization, the massive shift toward urban environments and the intensification of technology in everyday life have contributed substantially to people's distancing from the natural world, reducing their direct experience with it (Soga; Gaston, 2023).

A large part of the population inhabits artificial environments saturated with digital stimuli, with few opportunities to establish full sensory bonds with soils, trees, rivers and other living beings. This condition has given rise to what Richard Louv (2008) termed nature-deficit disorder, a phenomenon that describes how the lack of outdoor experiences negatively affects people's physical and psychological well-being, while also limiting their understanding of the place human beings occupy within the *anima mundi*. In this scenario of environmental alienation, understanding the implications of this disconnection and exploring paths toward a bodily and sensory reconnection with the natural world has become both a philosophical and a practical imperative.

In response to this situation, several contemporary philosophical and anthropological approaches have questioned the anthropocentric worldview inherent to modernity and have rethought the relationship between human beings and nature. One of the most relevant is deep ecology, formulated by the Norwegian philosopher Arne Naess (1973). This current abandons the idea of the human being as the center of the universe and proposes an ecocentric perspective in which all forms of life possess intrinsic value, beyond their usefulness to humans. From a posthumanist standpoint, scholars such as Donna Haraway (2008) and Anna Tsing (2015) have developed multispecies approaches that challenge the boundaries between the human and the non-human, emphasizing that we coexist with other beings in ecologically interdependent communities. Added to these perspectives is a renewed attention to the sensory and bodily dimension of experience in natural environments, grounded in phenomenological traditions that understand the body as the site of encounter between the self and the world (Merleau-Ponty, 2012).

The combination of this bodily experience, ecocentric thought and multispecies perspectives offers new pathways for rethinking our relationship with nature in an integrated way, overcoming the classical dichotomies between body and mind, or between culture and nature. As a result, this approach contributes to breaking with the insensitivity toward landscapes and bodies wounded by the ecological crisis, reminding us that it is no longer possible to justify everything in the name of progress or human interests, and of the urgency of cultivating forms of attention and responsibility that acknowledge the vulnerability shared among species.

This article aims to explore how sensory and bodily experiences in natural environments transform the perception of the self and of one's surroundings. By re-establishing a direct bond with the natural world, it contributes to reversing the widespread desensitization in the face of the ecological catastrophe. To this end, the theoretical foundations that articulate body and nature are reviewed, including deep ecology, phenomenology and

multispecies thought, and a theoretical-phenomenological methodology is presented, illustrated through field narratives.

From this framework, the ethical, ecological and existential implications that emerge from bodily contact with wounded natural environments are examined, placing direct experience in dialogue with the conceptual dimensions that traverse it. The aim is not only to understand, but to make visible sensitive ways of inhabiting the world that contribute to reimagining our relationship with nature in a moment marked by ecological urgency and the need for profound transformation.

The conclusions highlight how bodily experiences in natural environments, especially those affected by processes of ecological degradation or transformation, can help reconfigure the way we understand our sense of belonging to the living world. They also point to the challenges and possibilities of an embodied ethics oriented toward cultivating practices of care, attention and reciprocity with ecosystems. This perspective, far from being limited to the theoretical level, emerges as an effective path for nurturing educational, artistic and philosophical projects aimed at an integral ecological reconnection in the twenty-first century.

Deep ecology: from the ecological self to biocentric equality

Deep ecology emerged in the early 1970s as a philosophical response to the unsustainability of the utilitarian relationship between human beings and nature. Naess (1973), the precursor of this current, distinguishes between shallow ecology, concerned only with mitigating environmental damage according to immediate human interests, and deep ecology, which entails a radical revision of values and worldview. He argues that the environmental crisis cannot be resolved merely through technical adjustments but requires profound changes in the way we understand our relationship with other forms of life. Naess (1973) affirms that deep ecology recognizes the intrinsic value of all living beings and sees humanity as only one thread in the complex web of life,

adopting what he called biospherical egalitarianism, the idea that all organisms have the right to flourish on equal principles within the Earth system. This position stands in sharp contrast to traditional anthropocentrism, which assigns to nature a purely utilitarian value.

Naess and Sessions (1985) formulated a set of principles that underpin deep ecology. Among them, they state that the well-being and flourishing of human and non-human life on Earth have value in themselves; that the richness and diversity of life forms contribute to the realization of these values and possess intrinsic worth; and that human beings have no right to reduce this richness and diversity except to satisfy vital needs. These principles constitute both an ethical and a spiritual appeal to reposition humanity within, rather than above, the biotic community. Naess (1989) also introduced the concept of ecosophy, or ecological wisdom, understood as a personal philosophy oriented toward harmony with nature. Each individual or culture could develop its own ecosophy, yet all would share the premise of interdependence and respect for all forms of life.

Joanna Macy (1991) expanded the concept of deep ecology by emphasizing its experiential and psychological dimensions. The philosopher and activist describes a process she calls the greening of the self, through which the sense of identity is broadened from the individual self to an ecological self. According to the author, an important transformation in the notion of individuality is currently underway. The traditional conception of the individual as a separate entity, or a skin-encapsulated ego, using Alan Watts's (1966) expression, begins to be replaced by a self that is coextensive with other beings and with the life of the planet. This emerging ecological self implies that the pain or joy of the world comes to be felt as one's own. As a result, caring for the environment ceases to be an imposed duty and becomes a natural expression of self-care, since the self comes to include the earth, the waters and all other beings.

These theoretical elements provide an important basis for understanding the transformative potential of bodily experiences in nature. Experiencing a sense of belonging to something greater than the individual

self and feeling in one's own body the connection with other forms of life, can be understood as an experiential path toward what Naess (1973) and Macy (1991) describe at the conceptual level.

Corporeality and sensory experience in natural environments

If deep ecology provides the ethical and ontological foundations for reconnecting humans and nature, the phenomenology of corporeality offers the tools to understand how this reconnection takes place at the level of lived experience. Phenomenological philosophy maintains that the human relationship with the world is primarily constituted through the sensing body, understood as the primary condition of experience and perception (Merleau-Ponty, 2012). The body is not seen merely as a biological object, but as a perceptive subject, the matrix of experience in which both the self and the surrounding world are constituted.

Merleau-Ponty (2012) argues that our perceptions are not passive copies of external reality, but the result of an active and meaningful interaction: the world reveals itself to the body through a direct and pre-reflective communication. In the context of natural environments, this means that, for instance, a forest is not merely a collection of trees, but is configured through an interweaving of sensations, colors, sounds, textures and aromas in which the observer's body actively participates. In the author's words, nature speaks to all our senses at the same time (Merleau-Ponty, 2012). This indicates that perception is a synesthetic and integrative phenomenon.

Contemporary research in ecological psychology and neuroscience has reinforced the importance of this direct sensory engagement with natural environments for human well-being. Studies conducted in Japan on forest bathing (*shinrin-yoku*) show positive physiological effects when individuals are immersed in forest atmospheres, including reduced stress hormones, improved mood and even strengthened immune function (Li et al., 2007). These effects are attributed, in part, to the action of volatile phytochemicals

released by plants—the so-called phytoncides—which, when inhaled, produce beneficial responses in the human organism. Although these studies focus on biophysical outcomes, they also demonstrate the extent to which living bodies interact with natural environments: the chemical substances emitted by trees alter human metabolism, while natural sounds and forms modulate our heart rate and mental patterns. In this sense, the body reveals itself as a highly attuned sensor of the surrounding ecology, an affinity that urban life sometimes anesthetizes, but which can be reactivated when we return to wild or semi-wild environments.

From a conceptual standpoint, this leads us to an idea that has been gaining prominence, that of the ecological body. Reeve (2008) defines it as an immanent, co-creative and moving body, in a constant process of becoming within a transforming environment, in which both the body and the spaces between and around bodies are equally understood as dynamic. This definition breaks with the view of the individual body as a fixed and separate entity, proposing instead a relational conception in which body and environment form a continuous flow that mutually transforms one another.

Thus, being in a forest implies an expanded corporeality: our pores breathe the humid air of the woods, our retinas adjust to the greenish dimness filtered through the leaves, and our ears resonate with the chorus of birds and insects. It is not merely a matter of being in the environment, but of being and becoming with it, in a dynamic exchange. The philosopher David Abram (1996) reinforces this idea by arguing that human perception is intrinsically ecological, since our sensory faculties evolved in interaction with the more than human matrix of the Earth. He suggests that, by sensorially reconnecting with nature, an ancestral perceptual wisdom is recovered, through which we recognize other beings, a tree, a river, a bird, as presences endowed with agency, with which we communicate in a tacit manner.

In summary, studies on corporeality indicate that bodily knowledge, this tacit form of knowing that arises from the senses and from movement, is fundamental for reestablishing a meaningful relationship with natural

places. Direct bodily experience has the potential to remove us from the position of mere observers and to situate us once again within the natural world, as part of it. This sensory immersion facilitates what some authors call somatic learning, in which the body itself becomes a vehicle of learning and transformation (Hanna, 1988). In the context of this article, the phenomenology of the body helps us to understand how the individual may come to feel part of the forest or the river, not through intellectualization, but through sensitive and affective impressions that reposition the self in relation to the more than human other.

Multispecies collectives: beyond the human, among companion species

The theory of multispecies assemblages further expands this framework by explicitly including other living beings as co participants in these bodily experiences. This perspective emerges from the dialogue between anthropology, ecology and science and technology studies, proposing a symmetrical consideration of multiple forms of life in social and ecological phenomena. Haraway (2008), a central reference in this field, insists on the need to think the world with other beings, recognizing that humans live in complex networks of interdependence with animals, plants, fungi and microorganisms. She critiques the separation between nature and culture, arguing that we have always lived in processes of mutual creation, or worlding, with other species (Haraway, 2016). One of her mottos, make kin, not babies, urges us to expand relations of kinship beyond the human family, including what she calls companion species. This metaphor of kinship indicates an ethical commitment to treat other beings not as resources but as companions in existence, worthy of care and consideration. Haraway (2016) proposes the term Chthulucene to designate a time of coevolution among species, in which it is necessary to remain with the trouble of living together on a wounded planet rather than seeking escapist technological solutions. For

this, responsibility must be cultivated, understood as the capacity to respond to the other within a multispecies context.

In turn, the anthropologist Anna Tsing (2015) contributes to this approach through ethnographic studies that reveal how humans and non humans co constitute practices and landscapes. In her work *The Mushroom at the End of the World* (2015), Tsing follows the traces of the matsutake mushroom in devastated forests, showing that survival and forms of life emerge from the interactions among diverse species such as fungi, trees, human gatherers and spores carried by the wind. The author uses the concept of assemblage to describe these contingent aggregations of heterogeneous beings that, even without a prior project, come to form something close to a functional collective.

Tsing (2015) emphasizes that these assemblages are not static and do not merely bring together forms of life, but actively create them. In other words, when different species encounter and articulate with one another in the same place, new ways of living and relating emerge from this encounter. This view breaks with the idea of stable and balanced ecological communities, emphasizing instead the open and processual nature of multispecies associations. All these actors, trees, insects, birds and many others, interact and together constitute the forest as it is. Therefore, understanding the dynamics of a forest or a river requires an approach that takes into account the distributed agency of multiple beings, rather than focusing solely on human action or on an abstract notion of nature.

In the context of the bodily experiences under analysis, the notion of multispecies assemblage invites us to recognize that we are not alone when we encounter nature (Tsing, 2015). As we walk through a forest, our body becomes part of an encounter in which numerous active entities participate: the living soil with its microorganisms, the trees that exchange chemical information, and the animals that scent us or listen from a distance. Even if we are not consciously aware of it, there is a multispecies community around us that also involves us. For instance, the bacteria that inhabit our skin and

intestines interact with the external environment. This idea can be illustrated by simple phenomena. As we walk, we disperse seeds that attach to our clothes or shoes, becoming vectors for plant reproduction. When we enter a river, we disturb the sediments and frighten the fish that swim away. In these small actions we are already part of the local ecological network.

Multispecies assemblages thus bring with them a component of relational awareness, the perception of oneself as a participant in a broader collective of life. It involves developing sensitivity toward those who are with us, visible or invisible, when we enter a natural environment, and understanding how our actions reverberate in these others and vice versa. This sensitivity finds a parallel in deep ecology by recognizing the intrinsic value and the capacity for action of non-humans, and in phenomenology by attending to direct sensory interactions.

In summary, the theoretical foundations outlined here, deep ecology, phenomenological corporeality and multispecies assemblages, converge toward an integrated perspective. When the human body becomes fully immersed in a natural environment, it may experience a partial dissolution of the boundaries between self and world and between the human and the non-human, fostering the emergence of an expanded ecological self and a consciousness of co participation with multiple species.

Methodology

This study adopts a qualitative approach of a theoretical and conceptual nature, grounded in phenomenology, with a focus on understanding the cultural and symbolic meanings of experience. It is an exploratory study that articulates a bibliographic review with experiential analysis through an interactive and reflective mode of writing.

The study is centered on bodily experiences in natural environments, guided by the principle of “returning to the things themselves”, describing lived experiences as they are perceived before linking them to the concepts of

deep ecology and multispecies thought. The analysis is developed through narratives of corporeal relational experiences lived in the wounded landscape of Brumadinho, in Minas Gerais.

Brumadinho: a wounded landscape, when human solutions eliminate the possibilities of life

According to the Stop Ecocide International (SEI) movement (2021), “ecocide” refers to mass damage to or destruction of ecosystems, committed with knowledge of the risks, constituting severe harm to the natural and living world and contributing significantly to the current climate and ecological crises. Activities classified as ecocide include oil spills, plastic pollution, deep sea mining and mineral extraction, as well as soil and water contamination. The new Environmental Crime Directive of the European Union, approved on 27 February 2024, represents an important step forward by adopting stricter standards for the practical and clear enforcement of serious environmental crimes (European Commission, 2024). The Committee on Legal Affairs of the European Parliament voted unanimously for serious environmental crimes, ecocide, to be condemned under European Union legislation (SEI, 2023). This concept has been debated in international forums, with proposals for its inclusion as a crime in the Rome Statute of the International Criminal Court, according to the Stop Ecocide Foundation (SEF) (2021).

In Brazil, the situation is no different. In several regions and biomes of the country, severe environmental disasters have been occurring. One example is the case of Brumadinho, in the metropolitan region of Belo Horizonte, Minas Gerais, which suffered an ecocide of large proportions. On 25 January 2019, the tailings dam of Córrego do Feijão, operated by the mining company Vale S.A., collapsed, releasing an enormous volume of iron ore waste and causing widespread contamination of the soil, the air and the groundwater. The disaster resulted in the death of 272 people and caused immeasurable environmental and social impacts (Ibama, 2019; MPF, 2025;

Rocha, 2021). Unfortunately, this was not the first catastrophe of this nature in Minas Gerais. In 2015, the Fundão dam, owned by Samarco, a joint venture between Vale and BHP Billiton, also collapsed, spilling approximately 60 million cubic meters of tailings in what became known at the time as the largest environmental disaster in Brazil (National Water Agency, 2016). Other mines in the region remain in a situation of risk, generating great concern among the local population about the possibility of new collapses.

Tragedies such as these trigger a series of environmental, social and spiritual ruptures. The collapse of the dam is only the ignition point of an ongoing process of territorial violence. The social commotion generated by disasters of this magnitude, combined with the urgency for rapid responses, has led to reconstruction plans that do not contemplate the discontinuation of mining activities (Lima, 2022; Medeiros, 2022). Despite the high financial amounts disbursed by the company to repair the damage, with an estimated R\$30 billion invested in compensation measures by 2023 (Vale, 2023), the local population reports having been excluded from decision making processes, which results in deep dissatisfaction (Oliveira, 2025). The Paraopeba River, for example, remains highly contaminated, and estimates indicate that the complete removal of waste from the river may take from 44 years, in the best case scenario, to 741 years, in the worst (Instituto Guaicuy, 2025).

If the changes and solutions proposed so far have not been able to interrupt the extractivist logic that triggers damage to the planet, the alternatives considered to address it end up reinforcing the same system that disregards the intrinsic value of other forms of life and their rights to existence, participation and regeneration.

Reconstruction plans and actions for Brumadinho have been limited to exclusively human centered perspectives, often constrained by public policies and social organizational structures that make the processes slow and frequently ineffective (Conectas Direitos Humanos, 2024). At the same time, these solutions overlook other possibilities for socio ecological organization and territorial

reconstruction, ignoring forms of life, forms of knowledge and dynamics that could contribute to more integrative and regenerative processes.

It is within this context that the philosopher Báyo Akómoláfé (2022) proposes the radical gesture of slowing down in times of urgency. Instead of reacting with greater speed, a typical response of modernity, he suggests that only by reducing our pace are we able to perceive invisible resources, unconventional alliances and the possibilities of worlds that already exist at the margins of the hegemonic order. Slowing down, according to him, reconnects us with the hidden, the untamed and the wild, and allows us to listen more deeply to what has been silenced by centuries of colonization, rationalism and epistemicide, as noted by Boaventura de Sousa Santos (2014). Vanessa Andreotti (2021) complements this perspective by arguing that, as long as we remain conditioned by the logic of modernity, any imagination of the future will merely be a reconfigured version of the same structure, a masked modernity that continues to marginalize everything that does not fit within its frameworks.

In light of this, it becomes urgent to imagine other ways of living, existing and rebuilding that are not grounded in the same premises of destructive progress. Cooperating with non-humans, rivers, forests, animals, minerals and ancestors, may constitute a path that recognizes the interdependence and flourishing of all forms of life, questions the prevailing system and its hierarchies of value, reorients justice beyond the human species and also considers multispecies assemblages as life sustaining technologies essential for future solutions.

How, then, can we recognize and take into account the participation of multispecies in reconstruction scenarios of areas affected by catastrophes, as in the cases of Brumadinho and Mariana? How can we create futures that are not shaped by the logic and the ruins of modernity? How can we listen, with genuine openness, to the voices of waters, plants, animals and of the peoples who have never been disconnected from them? What other modes of rebuilding are waiting for us, latent at the margins, emerging among the tailings?

In this context, art becomes a path that engages with overlooked possibilities of life and multispecies assemblages. Phenomenology, in turn, provides the foundations for mobilizing other forms of knowledge, thus enabling a broader understanding of perception and reality.

Feeling amid ecological wounds

Six years after the tragedy, walking through Brumadinho is difficult. The scarcity of shade and the heavy traffic, intensified by the repair works, make even the simple act of walking challenging. When crossing the city's main bridge, one can see the Paraopeba River, one of the greatest symbols of the disaster that struck the region. The water was severely contaminated by the toxic mud released by the collapse of the tailings dam. Now turbid and reddish, it carries the memory of destruction. The belief that the river is dead makes the act of facing it painful, especially for those who once lived with its vitality (Tokarnia, 2023).

Instead of cultivating a mutual relationship of coexistence, ethics and care with the river, it has become merely a backdrop for the auto repair workshops installed along one of its banks. Drivers crossing the bridge are concerned with overcoming the traffic, while those who walk must divide their attention between the vehicles and the heat. A movement contrary to the flow of life seems to impose itself, creating a self-reinforcing cycle of invisibility: the less we see the river, the less we care about it, and the less we care, the more it disappears from our field of perception.

In order to break with this invisibility, a group of artists who chose to remain anonymous decided to challenge the hurried routine of passersby. Through the artistic intervention *The stories the river tells*, composed of works made from recyclable materials, there was an invitation to slow down and contemplate. The images of children swimming in the river, fishers casting their nets, birds flying overhead and native vegetation revived on the canvases evoked an everyday life that had been consigned to the past.

Extending one's gaze toward the riverbank, it was possible to see one hundred colorful fishing rods made of bamboo and fabric scraps fixed along its edge, a silent denunciation of a practice that had been violently interrupted (Tokarnia, 2023).

In such cases, art functions as a powerful driving force. First, because it communicates the territorial violence resulting from the crime tragedy that affected the region, and also because it serves as a channel for the expression and elaboration of grief, including its darker aspects (Harding, 2008, apud van Boeckel, 2024). By observing the works, people were led to reflect on their interconnection with this wounded ecological body (Leopold, 1949), and were thus called upon to feel the pain it carries, which in fact symbolizes the death of many forms of life, not only human lives.

Dealing with these wounds requires the courage to look, to feel and to cultivate an ethics of care. In this sense, the works of Macy (2014) and Harding (2006) emphasize that only by developing a deep love for the Earth can we truly engage in its healing. Cultivating an epistemology of love, instead of one grounded in separation, and relearning to live in peace and harmony with others and with nature, is the key to transforming the way we relate to the planet (Zajonc, 2006). This love, however, is neither romantic nor idealized, and demands the development of another way of being in the world, one that minimizes the damage caused to nature while deepening the individual capacity for wonder, enchantment and belonging to it (Naess, 1973; 1985).

If the development of a deep love involves a new way of interrelating with the planet, art also enables other connections and ways of envisioning, such as perceiving the river as a phenomenon to be approached through what the senses reveal (Harding, 2008, apud van Boeckel, 2024). While walking along the edges of the Paraopeba River, for instance, it is possible to notice what takes place around this body of water: birds fly over the surface, the vegetation surrounding the river remains green and dense, and the movement of circular waves indicates the presence of fish even amid the toxic

waters. It also becomes possible to understand the consequences of an invisibilized river. Open sewage and the city's recurrent floods speak of a lack of care for this wounded body.

The recognition that the contaminated river remains alive appears in some statements by the Indigenous leader Ailton Krenak. When asked about the impact of the Mariana crime tragedy and, specifically, about the Doce River, Krenak (2019) emphasizes that, for his people, the river is in a coma and will recover, with or without human assistance. Thus, both in the cosmovisions of traditional peoples and in deep ecology, the sentience of the river and of other more than human beings is acknowledged (Harding, 2006), as well as the vital role they play in maintaining the planet's ecosystem through a life sustaining technology that has been evolving for approximately 3.7 billion years (Benyus, 2012).

Becoming with the river

To slow down. Báyo Akómoláfé's words resonate within me. I try to relax. I notice that my body aches, a combination of sleeping on a mattress that does not provide adequate support and a domestic accident that resulted in a fractured nose. My body resists keeping pace with my demands. I look for a place where I feel safe to write. I make some tea, light a candle and allow myself to close my eyes for a few moments. I do not add music to the environment. The sounds here are already familiar: those of the street, of the garden and of the interior of the house.

For the past few days I have been reconnecting with the theme of Brumadinho. I relived the day of the crime tragedy, revisited photographs, recalled stories and spoke with friends to learn how they are and to receive news about what is happening in the city. I reread my writings, as well as some articles and news reports. I think about the river and how central it is to the city. It was on its banks that we decided to carry out the artistic intervention The story the river tells us. I remember how the idea emerged,

the rush on the day as we tried to finish the canvases, collect the bamboo and install everything that still needed to be in place before dawn. Our attempt to remain an anonymous group fell apart when we realized that the cameras installed on the bridge would expose us, since the camera system is connected to a public website that can be accessed by anyone. I recall my days in Brumadinho. Walking through the city made me feel unsafe. I stayed at the house of a friend who lives in the city center. The noise of the freight train, passing every hour, disturbed me to the point that my head would ache.

I ask myself what kind of agreement allows the train to pass through the city even during hours of rest. Does no one complain or question it? When I speak with residents, what I hear is that “it has always been like this”. How does this affect the mental health of the inhabitants? And how does it affect the biological cycles of local life, including those of the birds that, at a certain hour of the night, use their songs to communicate with others of the same species? What do these trains carry after a crime that left so many deaths and open wounds? Should mining not have been halted after the dam collapse? The city seems even dirtier, the result of dust from the trucks in transit and from the mining itself, which conceals the city’s beauty.

On my second day in Brumadinho, I decide to walk from my friend’s house to the Paraopeba River. It is about a twenty minute walk under the blazing sun, with no vegetation to soften the heat. The city seems even dirtier, the traffic is intense, and I encounter few people along the way. A constant feeling of insecurity accompanies me, both on the path that leads to the river and during the time I remain there. I walk along the banks and notice trucks parked on one side. I see open sewage being discharged into the river at two specific points. In general, I perceive public neglect. Some people walk there, but they do not stop to contemplate the surroundings. I cross the bridge in the space reserved for pedestrians. I see cameras installed in certain places, yet they do not make me feel safer. My body’s impulse is to protect itself and to run away. I allow the discomfort to reach it. I stop for a few minutes on the bridge. I decide to turn my back on the traffic and contemplate the Paraopeba.

An immensity of river. The image I carry in my memory of firefighters navigating the waters in boats in search of bodies gives way to the word declared: “DEAD”. My body remains suspended, restless in this place where life has no voice. The color of the water is still dark red.

I observe the auto repair workshops. They are out of place in that landscape, as are the trucks parked along the riverbank. The noise of the traffic behind me and the blazing sun intensify my bodily discomfort and remind me of the persistent feeling of insecurity. I realize that I am being watched. People observe what I am doing there. The cameras also seem to be looking, yet they do not protect me from the heat, from the traffic or from a possible assault. At the same time, I do not feel that anyone is looking at the river.

I decide to cross the bridge to reach the other side of the river. I walk to the end of the pedestrian crossing and spend some time trying to cross the street amid the passing vehicles. I am now on the other side of the bridge. I fix my gaze on the upstream river. This time, the banks are covered with vegetation, an immensity of shades of green. I do not see shops or parked cars on this side. Birds fly over the water, and I have the feeling that they notice that I am looking at them. They perform low flights, apparently indifferent to everything that happens there. One of the birds, from time to time, settles on a dry branch of a tree that stands almost beneath the bridge. I could spend hours observing the birds and the river. That view calms me and my body relaxes. Yet once again, the traffic, the heat and my sense of insecurity pull me away from the river, from the green, from life, and throw me back into the city, hard, dusty and scorching.

Two dissonant rhythms: on one side, the spring, life, the river, the wild; on the other, exploitation, metallic tones, control and death. It is difficult to accept, through mere observation, that the river is contaminated. I imagine that if the human component were removed from that territory, cars, workshops, buildings and the pollution discharged directly into the river, the landscape would change significantly. I walk back to my friend’s house. The

absence of green in the rest of the city intensifies the heat, the dust, the traffic and the sense of insecurity.

I stop writing for a minute. I close my eyes. I become aware of my body and of a tightening sensation near my heart. I reread what I have written so far. I adjust the words.

Perceiving the river as alive and engaging with the life that presents itself becomes possible through the practice of listening to the body of water. According to Stephan Harding (2006), the so called “deep experience” of nature, capable of awakening a sense of connection with Gaia, may emerge from both simple and intense encounters. However, for this experience to be translated into ethical action, a critical questioning is required, both personal and collective, one that challenges dominant cultural assumptions and reformist approaches, promoting changes aligned with ecological and intrinsic values, as proposed by Naess (1973), rather than being guided solely by economic value. Moreover, it is peaceful and democratic commitment that continually nourishes and deepens this deep experience.

Thus, the practice of listening to the body of water, combined with reflective writing and critical thinking, reveals the river not merely as a wounded landscape but as an ethical call, an invitation to slow down, to feel and to act with life, even, and especially, where it is at risk.

Ethics and politics: reconfiguring our relationship with the living world

As people come to perceive themselves as part of the fabric of life, they naturally begin to reconsider their attitudes toward the environment. This has ethical consequences, as a sense of responsibility toward other beings and places becomes consolidated. In deep ecology, this is expressed through the expanded imperative of self preservation: if the “self” includes nature, protecting the environment becomes an act of both self defense and altruism.

It is at this point that the idea of response ability, as proposed by Haraway (2008), becomes relevant, the capacity to respond to the call of the

other. When a walker in the forest keeps silent so as not to disturb a bird, they enact a small ethics of care, responding to the presence of that being with respect. On a larger scale, this can be translated into practices such as avoiding throwing waste into the river in which one has bathed, because it is now recognized almost as a friend, supporting the creation of a park to protect the forest where a significant experience took place, or becoming sensitized to crimes committed against other forms of life.

The collapse of the dam in Brumadinho was not only a human and social tragedy, it was also an assault on the body of the river, on the beings that inhabited it, and on the memory and integrity of an entire ecosystem. When we open ourselves to these experiences of sensitive connection with nature, we begin to perceive such events as aggressions against ourselves. In this way, both small and large choices start to be guided by a principle of non violence toward nature, similar to that advocated by Gandhi and which influenced Naess in the formulation of deep ecology.

At the political level, these shifts in individual consciousness must be reflected in collective and structural actions to address the ecological crisis. A society composed of individuals who are sensitive and connected to nature tends to demand public policies that are more environmentally responsible. This could mean greater support for the creation of protected areas, the approval of laws concerning animal welfare and the rights of nature, incentives for regenerative agriculture, the rethinking of reconstruction plans for affected territories, and other measures aligned with an ecocentric ethic.

We can already observe global movements in this direction, such as the granting of legal rights to natural entities, rivers, seas and forests, in countries such as Ecuador, Bolivia, New Zealand and, more recently, Spain. This legal recognition reflects the understanding that these entities possess intrinsic value and even legal personhood. These advances are, in part, the result of cultural transformations brought about by decades of ecological struggles and also by the influence of Indigenous cosmologies, which for millennia have recognized the personhood of rivers and mountains.

Within the context of this article, we may infer that intense embodied experiences in nature and or in wounded territories can play a significant role in raising awareness and mobilizing people around these causes. For example, leaders and decision makers who take part in immersive nature-based workshops, a practice well known in corporate and governmental circles through outdoor training and environmental leadership programs, often report new insights into interdependence, which renews their commitment to sustainability. Furthermore, the study of phenomena and their processes enables a broader understanding of nature and helps to identify ways of coexisting and developing solutions that take into account multiple forms of life and their relationships, as well as the important role they play as regulators of life.

However, it is also necessary to recognize the challenges and limits of this process. Not everyone has easy access to natural and preserved environments. Urbanization and social inequality mean that marginalized populations suffer disproportionately from disconnection from nature, peripheral neighborhoods, for example, tend to have less access to green areas. An imperative of environmental justice thus emerges: it is necessary to democratize access to nature, ensure high quality public parks, integrate nature into cities through biophilic architecture, include urban gardens, among other strategies. Politically, this presupposes an ecological urbanism and policies of inclusion.

Deep ecology, in turn, has been criticized for focusing excessively on individual transformation while neglecting structures of power (Bookchin, 1987). An integrative perspective must combine inner transformation, that is, a change of values through experience and education, with external transformation, whether through political mobilization, pressure for improvements in public policies, the adoption of clean technologies, among other paths. Fortunately, these approaches are not mutually exclusive. On the contrary, individuals with a profound ecological awareness tend also to be more committed in the political sphere.

Thus, the debate leads us to the conclusion that sensory and embodied experiences in natural landscapes are not only beneficial at the individual level, but also constitute a pillar for a broader socio ecological transformation. They shape more conscious, empathetic and connected individuals, capable of committing themselves to the construction of a society grounded in ecological principles. Ecosophical education therefore appears to be a fertile path for institutionalizing these practices and values, creating future generations able to face environmental challenges with the necessary wisdom, courage and sensitivity. In this context, art emerges as a valuable channel for expression and transformative dissemination.

Conclusion

In this article, we have explored both the subjective and the collective dimensions of embodied experiences in contact with forests and rivers, also examining their ethical and political repercussions. We identified that, when moving through natural landscapes, and especially through a wounded landscape such as the Paraopeba River, subjects undergo significant transformations. Among these are the sharpening of the senses, the alteration of bodily and mental rhythms, the emergence of emotions such as wonder, a sense of belonging and care, practical learning and the incorporation of new habits of movement. In some cases, there is also the perception of a momentary dissolution of the boundary between the “self” and the environment.

These findings were interpreted through theoretical frameworks that broaden the understanding of ecological experience. Deep ecology offers the notion of the “ecological self”, which describes the subject’s profound identification with other forms of life. The idea of the “ecological body”, in turn, emphasizes the dynamic relation of co creation between organism and environment. The multispecies assemblage perspective highlights the

participation of multiple beings, human and more than human, in the experiences that constitute those who live together with nature.

From the perspective of learning, the main conclusion is that the body, when immersed in nature, holds a capacity for knowing that escapes abstract rationality: a tacit and sensory wisdom that reveals the interdependence between living beings and the planet. This embodied ecological awareness complements both scientific and traditional forms of knowledge, expanding the perception of existence as something shared. Studies indicate that such bodily consciousness brings tangible benefits, such as improved well being, reduced stress and a strengthened sense of meaning in life, as well as more subtle effects, including the development of expanded attention and a deeper sense of ethical responsibility.

However, important challenges were also identified. One of them concerns the ability to transpose these experiences into everyday urban life and into broader social structures. In this context, art emerges as a powerful instrument for mediating and disseminating such experiences. Another challenge relates to the reconciliation between individual transformation and the urgency of structural change. Reconnection with nature, however profound, cannot remain limited to the contemplative sphere; it must be translated into concrete actions aimed at preserving life on the planet. In this sense, ecosophy needs to unfold into ecopolitics, without losing the dimension of care and love, dimensions that, precisely, give meaning to the struggle for environmental justice.

Finally, we reaffirm the image of the body walking among trees or along watercourses as a symbol of ecosophical hope. In it, we see a human being who once again opens their senses to the living world, who rediscovers the joy and the humility of being one among the many inhabitants of the planet. This human being, touched by nature, brings to their community a silent yet powerful message: we too are Earth. By incorporating this simple truth, that our bodies are an extension of rivers and forests, we may trace wiser paths toward a civilization that cares for the biosphere as it cares for itself.

The path toward a truly ecological education and culture is challenging, yet the steps taken on the moist soil of the forest and on the stones of the river show us that there is firmness and learning even on uncertain ground. Like a river that flows by bending around obstacles, we will move forward, inspired by sensitive experiences and guided by a vision of multispecies harmony, in the construction of a future in which the education of the self and the education of the Earth become one.

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