

5. THE AMPLIFICATION OF ECOLOGICAL AWARENESS THROUGH ART PRACTICE: THE ECOARTIVIST DRAWING OF *ECOLOGÍA DE UN ABRAZO* [THE ECOLOGY OF AN EMBRACE]

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Abstract: In this presentation I will discuss the potential of artistic practices to amplify ecological awareness. I will describe a specific art practice that can be replicated in the classroom by other teachers: *Ecology of an Embrace*. This is an ecoartist project (ecology, art and activism) that recalls the eco-feminist spirit of the Chipko women. It presents a participatory approach involving social and human networks (human capital in a 2.0 context). It articulates a dialogue between real bodies / real space and social profiles / virtual space, broadening our capacity for analysis in the current environmental and civilisational crisis. The objectives and / or effects to be achieved are:

- To be able to see the other in ourselves and ourselves in the other.
- To promote empathy.
- To amplify our perception (plurisensoriality).
- To feel the connection with the cosmos.
- To encourage the growth of mycorrhizae: making existing mycorrhizae visible and encouraging the emergence and growth of new ones through narrative formulas.

Key words: Ecological Awareness, Drawing, Embodiment, Ecoartivism, Chipko

1. Introduction

Ecology of an Embrace is an artistic project that was first brought into existence in the third edition of the workshops of the Forum of Relational Art FAR 03 ECOFEMINISMOS, at the Cañada Verde Nature Centre, located in the Sierra de Hornachuelos Natural Park (Dehesas de Sierra Morena Biosphere Reserve), in 2018. Subsequently, and in a very different context, an adapted version was carried out at MediaLab Madrid: *Ecology of an Embrace (Extrapolated)*; Or, *How to Organise Our Life around the Perimeter of a Tree*. This second version was carried out within the framework of the seminar *El arte de corporeizar el entorno: Prácticas artísticas y pedagógicas a través del sentir* [The Art of Corporealising the Environment: Artistic and Pedagogical Practices through Feeling],²³¹ which took place in the art centre MediaLab Prado, Madrid.

It has been put into practice on other occasions with students from the Faculty of Fine Arts at Universidad Complutense, also in Madrid. There are a series of common goals in these approaches that are clearly maintained here, and which have been set out in the previous summary. In an underlying way, and as a background work, this artistic proposal is a small space of resistance. It attempts to shake up a number of pre-established logical tenets, and propose new ways of doing. It promotes the embrace as a tool, cooperation as strength, and the use of social networks as a way of shaping a profile of the human capital to which we are connected.

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²³¹ <https://www.ucm.es/art-embodiedcognition-ecology/el-arte-de-corporeizar-el-entorno>

2. Chipko Values

Undoubtedly, one of the most internationally renowned ecofeminist voices is that of the Indian physicist and philosopher Vandana Shiva. In 1988 she published a highly significant text, *Staying Alive*, in which she devotes a chapter in homage to "the women of Chipko". Shiva stresses the avant-garde character of Indian movements in defence of forests, land and water, and states that "environmental movements like Chipko have become landmarks because they are stimulated by ecological ideas and the political and moral vigour of women".²³² Although the movement has sometimes been portrayed under male leadership, the bulk and lifeblood of the Chipko movement is the body of women; "three hundred years ago, led by a woman named Amrita Devi, more than three hundred members of the Bishnoi community in Rajasthan sacrificed their lives to save the sacred Khejri trees by embracing them. With that fact begins the recognisable history of Chipko".²³³ This movement is an example of pacifist activism, promoting cooperation networks, as well as defending environmental and equality values.

Shiva speaks, among others, of the contributions of Mira Behn, whose experience and studies of the Garhwal region were passed on to her successors. Mira emphasised the significant difference between replanting a region with one tree or another, because according to her, floods and droughts were related to the disappearance of certain species of trees (banj and kharik). In other words, planting involves choosing those that are ecologically suitable. The replacement of banj forests and various species by easily traded pines was the main cause not only of the deterioration of the environment, but also of the deterioration of women's lives, as these pines did not fulfil the ecological and economic functions of banj.

Forests are not uniform sets of interchangeable parts; they respond to needs and are sustained in a dialogical balance. We are beginning to discover the profound impacts that biodiversity has on living systems, as we learn about the complex webs of communication between species. We are eco-dependent, tiny pieces of a vast interconnected web; for mountain women, says Shiva in her text, "food production begins in the forests, their disappearance and the lack of water are problems of survival".²³⁴ Following the same dynamic, our survival is conditioned by resources far from our horizon, resources shared with many others whom we do not see either. Being aware of these links is fundamental to our life experience; it has a direct impact on how we perceive resources, how we use them, and how we relate to other living beings.

3. Where (Neither) the Body Ends (Nor) the Line Begins

Where does the mind end and the world begin? With this question, Larissa MacFarquhar began a long article on the thought of Andy Clark in *The New Yorker*.²³⁵ Clark affirms that the human mind uses external elements to expand its processes; a notebook or some captured images to remember the reflection from

²³² Vandana Shiva, *Abrazar la vida* (1995), page 115

²³³ *Idem*, page 114

²³⁴ *Idem*, page 121

²³⁵ The Mind-Expanding Ideas of Andy Clark. The tools we use to help us think—from language to smartphones—may be part of thought itself, in *The New Yorker*, March 26, 2018. Retrieved from <https://www.newyorker.com/magazine/2018/04/02/the-mind-expanding-ideas-of-andy-clark>. Last checked on 27/04/2019.

which we made a specific decision would be typical examples. This is (in an exceedingly schematic way) the ground on which Clark stands when he talks about extended mind (1998). From the practice of drawing we could take up some of his questions:

Is there an unbridgeable fracture between what we think, what we project, what we are..., what we draw? The act of thinking, detached from our body, will not take us very far; understanding that our mind is connected to the planet leads us, says Tonia Raquejo (2015), not only to the emergence of an ecological conscience, but to creative models in which art functions as an engine.

We speak of embodied knowledge when in learning processes we lean heavily on the capacities of the physical body; the body would have in such situations a causal or constitutive role within the cognitive process. In general terms, when we talk about learning, we tend to give the mind a clear lead. This is the result of the Cartesian legacy, that sharp division between body and mind, such an implacable dualism, but... it is so foolish! It is so preposterous that it could be compared to talking about our digestion and considering only the stomach and forgetting the intestines. To understand our body as a kind of annex of the mind, a mere gateway for inputs, is a terrible mistake that we keep on making.

What in the Anglo-American realm is called *embodied cognition* has for some years now represented one of the most important research programmes in contemporary cognitive sciences and, although there are differences of opinion on several issues, the core idea is that the morphology of our body, emotions and the sensomotor or sensory-motor system directly affect cognition. When we refer to "cognition" we mean something that goes beyond the act of thinking, involving emotions, mental processes at unconscious levels and so on. The more research is done in neuroscience, the more the idea that the body is part of the mind is strengthened. From the gut to the fingertips to what goes through our vision system... everything interacts. Everything is connected: our senses affect our derived thinking, and that thinking conditions our perception.

4. Development of the Work / Workshop

As I have mentioned earlier, *Ecology of an Embrace* recalls the ecofeminist spirit of the Chipko women. That is why the first part of the workshop consists of a brief review of the emergence and development of this movement, accompanied by some archive images. The information offered is quite synthetic, although if there is time, it could be expanded upon; Chipko connects us with ecofeminist theories and the relationship between gender and ecology. It is essential to underline that it is a movement that emerged in the 1970s and that the tactical essence of the movement is to embrace trees in order to prevent them from being cut down; that is to say, to combat a violent action with an act of affection, the emotion becomes a force.

The Chipko use the embrace as a combat tool, they embrace life because, without those trees, there is no future to be lived. This is something we must not forget, it is symptomatic of how our worries have been growing, and how ecological awareness has emerged in recent decades: the main reason why these women embrace these trees is that they are vital to their economy. Although today we repeat

this gesture as an ecological demonstration, as the expression of a desire for change towards sustainable formulas or as an act of "emotional people", that first activist embrace was almost a cry for subsistence in the face of a tragic loss of resources.

In support, and also in an ecofeminist vein, we review the Green Belt Movement. This movement, led by Wangari Maathai, marked a turning point for Kenyan women. Maathai said that each tree has its own personality and that, as it grows and the landscape changes, so does the mentality of the people.²³⁶ One of the most important issues to highlight from her work with the Kenyan women is that she taught them that small actions can bring about big changes. The main trigger for the green belt was teaching the women how to plant trees. As unremarkable as this may seem, through this teaching these women understood the direct impact of their actions on the richness of the land on which they pass their lives, and that of the "land", which is their own bodies. They understood that their health began in the health of the place.

Their struggle simply followed the connected dots: deforestation, poverty, ignorance, social justice... to meet economic interests and political authoritarianism head on. From the humble act of planting and defending these plantations, a movement with political force was born. The 2008 documentary *Taking Root: The Vision of Wangari Maathai* is a valuable source of information. To plant is to embrace, to care, to protect. In 2004 Maathai became the first African woman to be awarded the Nobel Peace Prize, highlighting her work for sustainability, development, democracy and peace in her country.

It is also interesting to address the concept of Cosmothesis; it helps us to take a distance in relation to what we are on a broad plane (Big Scope) in which we are not framed in the history of humanity, but in the Big History, the history of the cosmos. Cosmothesis, in a very synthetic way, would be to experience new ways of being on the planet and in the cosmos, expanding the concept of the Self to a state of belonging and unity with the universe. Connecting from these theories emphasises our direct link –at the level of matter- with the origins of the universe in which everything is inscribed.

What we already know, but do not always bear in mind: matter is limited, it does not appear and disappear, it simply transforms. The understanding of modern cosmology places human beings within the grand narrative, from the Big Bang to the formation of galaxies, the merger of the Earth and the solar system, and the origins and evolution of life.... This narrative thread reminds us that we are not separate from nature and its processes, we emerge from it. We are kin, literally, to all life on Earth (Blundell, 2015). This projection fundamentally challenges our understanding of what it means to be human in relation to the natural world. From these conceptual bases we move to action, from the work / workshop we propose to make a manifestation in a Chipko key from our "today".

5. The Embrace

It is fundamental to talk about plurisensoriality; there are many ways of

²³⁶ "A tree has a personality, and as it grows and changes the landscape it also seems to change the minds of the people" in: *Taking Root: The Vision of Wangari Maathai* (2008), a documentary by Lisa Merton y Alan Dater. Retrieved from <http://takingrootfilm.com/>.

situating ourselves in the natural environment and if we are not "open", if we feel what surrounds us as an aggression, we will greatly limit the effects of the practice. Being aware that our senses go beyond the five traditionally known (sight, touch, smell, hearing, taste) and of the connections between the different sensory inputs, will make us much more receptive. As Marta Tafalla says, we need to remake the map of the senses (2019, page 93). Small meditation practices outdoors can also awaken us on a sensory and creative level (Trungpa, 2001, page 40). In *Animate Earth*, Stephan Harding describes some practices we can do; formulas that attempt to bring together science, meditation and embodied knowledge.

The first edition of *Ecology of an Embrace* took place in a place located in a protected natural area. In these conditions, we started with the aim of embracing "in Chipko key" the mountain range (a part of it). For this we need to know, on the one hand, the total perimeter sum of all the trees that populate the area we want to embrace, that is, the sum of all the perimeters. And, on the other hand, we need to know our human capital: how many people we have to be able to make the embrace, and how much the extensions of their embraces add up to, basically, "How much their embrace measures from heart to heart".²³⁷ Sometimes the trees are so thick that a pair of arms –and the corresponding piece of torso- is not enough; in such cases, we have to borrow a piece of hug in order to complete the gesture (here, as we shall see, the potential of social networks comes into play). The opposite can also happen, that we "have a piece of hug left over" and we can offer it to hug another small tree.

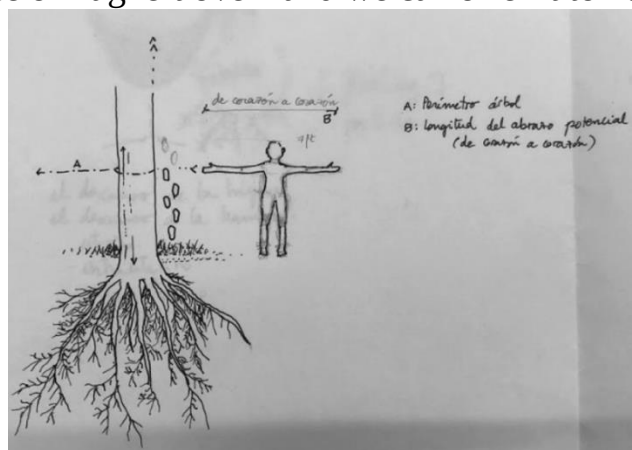


Figure 1: The girth of a tree (A) should be measured at breast height.

The diameter or circumference of a tree, a measurement used in tree recording and cataloguing, is always taken at breast height. The abbreviations used for this measurement are: DBH= "diameter at breast height", or CBH= "circumference at breast height". We have in any case two fundamental measurements to calculate: the sum of the perimeters of tree capital (A) and the sum or hugging capacity (in centimetres) of our total human capital (B). Economy and Ecology are very close at this point, the root, *oikos*, which in Greek means house (basic unit of Greek society), connects with affections and cooperation.

As it is entirely predictable that A will be much larger than B (even if we limit it to a small area), we will have no choice but to "borrow the arms" of Chipko-spirited people who are willing to embrace. To add their potential embrace to our sum, we will ask for a sound statement (via social networks). The statement can follow this formula: "I am XXX, my embrace is XXX cm from heart to heart".

²³⁷ From the end of the middle finger of the left hand to the end of the right hand



Figure2: Code that gives us access to a sample sound, asking our WhatsApp contacts to lend their hugs. Sound source: Marta de la Parra.

In the practice I carried out at MediaLab Prado in Madrid, I made some considerations about what it means to share. Very often we think that sharing is dividing; when I share, I lose to a greater or lesser extent, but I lose. This reasoning is not always true; let's think, for example, that we share a car with a group of people, we are not going to "split" the car, we will take turns, so that sometimes the car is all mine. It is true that it is intermittent, "sometimes yes, sometimes no", but I don't enjoy a part of it, I enjoy the whole of it. If we take this to the space of the forest, we could think of mycorrhizae connecting various trees. Mycorrhizae are symbiotic associations between the hyphae of some fungi and the roots of higher plants. The fact of "sharing a fungus", far from diminishing the enjoyment of the fungus, expands the power of those trees, we would almost say that sharing multiplies.

Rethinking many of the situations in which "less" is considered something detrimental would come as a pleasant surprise. It would serve to "deprogram" our reasoning. In the presentation of the workshop, a recording of which is available in audio format,²³⁸ it is noticeable that, rather than working on the communal embrace and carrying out this affective act or moving manifestation that appeared in the original approach, the objective would be to focus on the embraces of each and every one; then, to study the group aspect in an act of sharing. Each participant cooperated with others to find out their hugging potential and then made a representation –a chalk drawing on the floor- of the (maximum) section of the tree that they could embrace.

That tree was their life. In the same way that for the Chipko trees were the guarantee of survival, we asked ourselves these questions: what do I need to be alive? What is this tree that "my vital embrace" is made of? Each person divides the section of their tree into what it is made up of, how much time do I want to spend in nature, how much time do I need to sleep...? It is not a question of filling it with desire; it is an exercise in which we try to be positive while remaining realistic.



Figure 3. Documentary image of the drawing practice. Photo by the author.

²³⁸ <http://veronicaperales.eu/abrazo/>

Our main interest when sharing these experiences is to see the points of confluence, which are the common desires. These common causes will help us to represent the mycorrhizae of the forest that we form (drawn on the ground). Mycorrhizae are the true sustenance of the forest; they will allow the exchange of substances and cooperative as well as supportive relationships.

The embrace of the tree is an embrace of who we are, an embrace of ourselves in time. In *Claves Ecofeministas*, Alicia Puleo talks about the indigenous paradigm of Sumak Kausay, also called "Good Living".²³⁹ In contrast to the exacerbated individualism promoted by the consumer society, in Sumak Kausay the quality of life does not depend on excessive consumption, but on the harmony between individuals, peoples and nature. When our centre comes out, when we manage to perceive and think beyond our *Umwelt* (self-centred world) our understanding of life is enriched.

6. Final Considerations

One of the most relevant questions that emerge throughout the practice is the one referring to our bodily limits. When the participants collaborate with each other to find out their "hugging capacity", certain limitations of their bodies become latent, they cannot embrace an object that exceeds certain dimensions, nor can they measure themselves without the help of another person; we are interdependent, as well as eco-dependent. Far from proposing these evidences as negative aspects, in practice they are presented as fertile starting points with great potential, it is as if they implicitly carry the keys to understand the world "anew", from another vision; in this context "finitude is presented as a gain and not as a loss" (Tafalla, 2019, page 25).

That very finitude can favour cooperation. Lynn Margulis' theory of symbiogenesis (2001) was revolutionary and attractive at the time for many reasons; chief among them, because it placed cooperation between different organisms at the centre of the evolutionary process (at a time when science was extolling competitiveness as a determining value for evolution). Qualities linked to masculinity from tradition are "unseated", deactivated, by the effect of "other" ways of doing things. Something similar is what happens with the Chipko hugs.

Mary Beard, reflecting on how rare it is to find women in spheres of power, says: "If we look at some of the women who have "made it", we see that the tactics and strategies behind their success are not limited to copying masculine expressions. One element that many of these women share is the ability to turn the symbols that normally disempower women into an advantage in their favour".²⁴⁰ Hugging, a gesture so often associated with motherhood, with care, is a powerful weapon. A weapon of openness, of reflection: a trigger for change.

The evolution of the Chipko movement, as Alicia Puleo points out, began with the defence of communal forests in the name of the feminine principle of nature and later led to a struggle against gender violence and in favour of women's political participation. It is not always possible to rescue from the past in our favour, traditions are often accompanied by references to gender roles and identities that are

²³⁹ Alicia Puleo, *Claves Ecofeministas* (2019), page 38

²⁴⁰ Mary Beard, *Mujeres y poder. Un manifiesto* (2018), page 81

highly questionable from a feminist perspective, which is why we must "revise customs based on patriarchal prejudices, even those that correspond to ecologically convenient cultures".²⁴¹

Recovering valuable fibres from these ancient traditions and connecting them to the technological networks of the future can help us to wake up. Tomorrow does not lie in the denial of technological advances, but neither does it lie in the depletion of the resources on which they are based. Keep the counsel of your own roots, and project your branches: this forest is.

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