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“Where is the tree? Where are the roots?” Interlacing narratives
of the felled Blood Beech in Wertheimsteinpark: An analysis
from Donna Haraway’s perspective

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Zusammenfassung

Diese Forschung reagiert auf die Notwendigkeit, über den Fall, über das Fällen einer Blutbuche zu sprechen, die im Wertheimsteinpark, einer Grünanlage in Wien, Österreich, lebte und starb. Die Ethnographie ist eingebettet in die Konstruktion von Multispezies-Narrativen und befasst sich mit Fragen, die in der Diskussion über den ontologischen Turn aufgeworfen und im Rahmen von Donna Haraways Denken beantwortet wurden (z.B. 1988, 2004c, 2020g). Ziel der Untersuchung war es daher, herauszufinden, welche Elemente des Denkens von Donna Haraway in der Verflechtung der Erzählungen über die Abholzung der Blutbuche im Wertheimsteinpark präsent sind. Theoretisch-methodisch wurde die Feldforschung zwischen März und Mai 2021 in der näheren Umgebung des Baumes durchgeführt. Der Prozess wurde durch das partizipative Forschungsmodell von Genat (2009) und das Konzept des situierten Wissens von Haraway (1988) geleitet. Zu den verschiedenen Techniken der Informationsgewinnung gehörten unter anderem ethnografische Gespräche, fotografische und audiovisuelle Aufnahmen, die Durchsicht dokumentarischer Quellen und die Systematisierung der von den Teilnehmer:innen zur Verfügung gestellten schriftlichen und visuellen Materialien. Die gewonnenen Informationen wurden auf der Grundlage der Leitlinien von Clarke, Friese & Washburn (2015) analysiert, welche sich auf die Erstellung von Situations-Maps beziehen und auch nicht-menschliche Elemente einschließen. Folglich erkennt diese Forschung ausdrücklich die Rolle nicht-menschlicher Wesen in der Verflechtung lokaler Narrative mit dem Ort an. Die Forschungsergebnisse ermöglichten die Identifizierung von vier miteinander verwobenen und koexistierenden Erzählungen: die offizielle, die der Dissident:innen, die passive und die imaginierte Erzählung. Aufgrund der Interpretation der Narrative im Rahmen des Denkens von Donna Haraway lässt sich feststellen, dass die Blutbuche ein semiotisch-materieller Knotenpunkt, eine Companion Species, ein Oddkin und eingebettet in ein sympoietisches System ist, dessen Wirkung auch die Konstruktion des Chthulucene-Narrativs beeinflusst.

Abstract

This research was conducted as a reaction to the need to talk about the felling of a Blood Beech that lived and died in the Wertheimsteinpark, a park located in the city of Vienna, Austria. The ethnography carried out is framed within the construction of multispecies narratives and addresses issues embedded in the discussion of the ontological turn that have been worked on from Donna Haraway's thought (e.g., 1988, 2004c, 2020g). Consequently, the aim of this research was to identify which elements of her perspective are present in the interweaving of narratives about the logging of the Wertheimsteinpark Blood Beech. In theoretical-methodological terms, the fieldwork was conducted between March and May 2021 in the area of the park where the tree used to be. The process was guided by Genat's (2009) participatory research model and Haraway's (1988) situated knowledge perspective. Among the different information production techniques, ethnographic conversations, photographic and audio-visual recording, review of documentary sources, systematization of written and visual materials donated by the participants, among others, were carried out. The information produced was analyzed based on the guidelines of Clarke, Friese & Washburn (2015), which refer to the construction of situational maps where non-human elements are also included. Subsequently, this research explicitly recognizes the agency of non-human beings in the interweaving of local narratives associated with the territory. The results identified four intertwined and coexisting narratives, which are: official, dissident, passive, and imagined. Similarly, the interpretations of the narratives in the framework of Donna Haraway's thought, allowed arguing that the Blood Beech was a semiotic-material node, a companion species and an oddkin, inserted in a sympoietic system, whose agency also influences the construction of the Chthulucene narrative.

Resumen

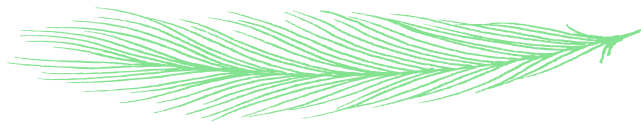
Esta investigación se realizó como una reacción a la necesidad de hablar sobre la tala de la Haya de Sangre que vivió y murió en el Wertheimsteinpark, un parque ubicado en la ciudad de Viena, Austria. La etnografía realizada se enmarca en la construcción de narrativas multiespecies y aborda temas insertos en la discusión del giro ontológico que han sido trabajados a partir del pensamiento de Donna Haraway (e.g., 1988, 2004c, 2020g). Consiguientemente, el objetivo de la investigación consistió en identificar qué elementos del pensamiento de Donna Haraway están presentes en el entrelazamiento de narrativas sobre la tala de la Haya de Sangre del Wertheimsteinpark. En términos teórico-metodológicos, el trabajo de campo fue llevado a cabo entre marzo y mayo del 2021 en el área del parque donde solía estar el árbol. El proceso fue guiado por el modelo de investigación participativa de Genat (2009) y la perspectiva de conocimientos situados de Haraway (1988). Entre las distintas técnicas de producción de información, se realizaron conversaciones etnográficas, registro fotográfico y audio visual, revisión de fuentes documentales, sistematización de materiales escritos y visuales donados por los participantes, entre otros. La información producida fue analizada a partir de los lineamientos de Clarke, Friese & Washburn (2015), que refieren a la construcción de mapas situacionales en donde también se incluyan elementos no-humanos. Consecuentemente, esta investigación reconoce explícitamente la agencia de los seres no humanos en el entrelazamiento de narrativas locales asociadas al territorio. Los resultados de la investigación identificaron cuatro narrativas entrelazadas y coexistentes, las cuales son: narrativa oficial, narrativa disidente, narrativa pasiva y narrativa imaginada. Del mismo modo, las interpretaciones de las narrativas en el marco del pensamiento de Donna Haraway, permitieron argumentar que la Haya de Sangre fue un nodo semiótico-material, una especie compañera y un pariente raro, inserto en un sistema simpoiético, cuya agencia también influye en la construcción de la narrativa del Chtuhuluceno.

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0. Introduction

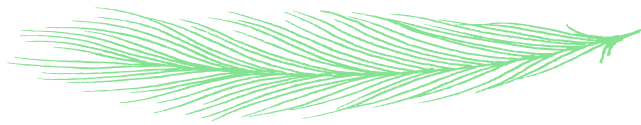
During 2020 I started to visit the Wertheimsteinpark with some frequency. On those afternoons I used to go and sit at the roots of a Blood Beech that was located in the highest part of the park. One day in July of that year, I was surprised to find that the tree had been fenced off. Nevertheless, I remained in the area reading a book. While I was enjoying my reading, I overheard a father-daughter conversation. The adult commented to the little girl „*Oh, schau mal, was mit meinem Lieblingsbaum passiert ist!*“. At that moment, I became aware that the Blood Beech was also my favorite tree.

Weeks later, I visited the park with a friend. As soon as she saw the fenced tree, she said to me: „*oh no, Rayen, I am very sorry, but this tree is going to be cut down, it must be sick*“. I didn't want to believe her, I preferred to think that it was being maintained and that the city of Vienna would never cut down such a beautiful tree. Months went by, the tree remained fenced in and without major changes. One winter night, I went to visit the Blood Beech. It was still there. I jumped over the barriers, and I was able to hug it for the last time. A week later, when I visited the park, my beloved Blood Beech was gone. They cut it down, only the roots and a bit of the trunk remained. On that occasion, there were two of us, the impact of the non-tree left us silent. I could not hold back the tears. The emptiness it left in the space – physical and emotional – was impressive.

I returned home thinking about the meaning of voids, of absences, about the relationship between space and our identity, about my relationship with that tree. The Blood Beech was a non-human agent with whom I established an important bond.

During my subsequent visits to Wertheimsteinpark, I was able to observe from over 200 meters away the absence of the tree and its impact on the landscape. In those days, I realized that I was not the only person interacting with this “non-tree”. I spent time observing people's reactions to the new emptiness. For example, there were people who photographed the space; others who contemplated the “non-tree” and made some comments about it; and others who climbed its trunk – even with their dogs. In short, there were different reactions according to age and time spent in the space. I had found my research topic. This master's thesis is not only about, but also a reaction to the absence of the Blood Beech.





This ethnography is framed within the discussions on constructions of multispecies narratives based on situated knowledge and relational ontology within the framework of Donna Haraway's thinking (e.g., 1988, 2004c, 2020g)¹. From this, the Blood Beech was understood as a semiotic-material node, a companion species and an “oddkin”, whose absence generated an impact on the construction of diverse narratives of park visitors. The interaction of these narratives is understood from dynamics of coexistence and dispute for its hegemony.

Consequently, the guiding question of this research was: *what elements of Donna Haraway's thinking are present in the interlacing of narratives about the felling of the Wertheimsteinpark Blood Beech?*

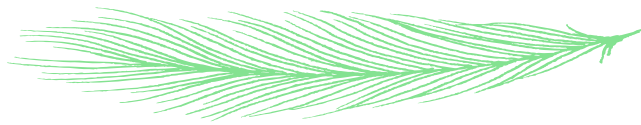
In order to carry out the research, bibliographic, and documentary material associated with human-trees relations, ideas of Donna Haraway and authors such as Kohn (e.g., 2015), Latour (e.g., 2005), Viveiros de Castro (e.g., 2015)² involved in the discussion of the ontological turn were reviewed. In addition, fieldwork was conducted between the months of March and May 2021 in the area of Wertheimsteinpark where the Blood Beech used to be. The fieldwork process was guided by the participatory research model proposed by Genat (2009) and the methodological principles of situated knowledge by Haraway (1988). To perform the analysis of the bibliographic and ethnographic information, situational maps were constructed from the guidelines of Clarke, Friese & Washburn (2015). This methodological decision was chosen because this proposal of situational maps explicitly considers the agency of non-human agents.

Based on the interpretation of the results and their linkage with the established methodological frameworks, this master thesis has the following chapters:

Chapter 1: This chapter briefly introduces the study through a general contextualization of the fieldwork site. Specifically, it provides details about the Wertheimsteinpark, its visitors, and the Blood Beech.

¹ For details, see references.

² For details, see references.



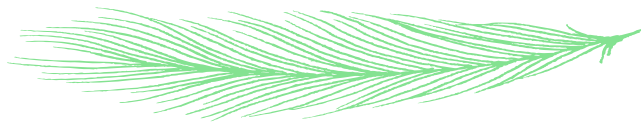
Chapter 2: The second chapter consists of a bibliographic review in which background information on different ways of understanding human-tree relationships is presented. From this chapter it can be observed that this relationship is built from different dimensions that inter and intra-act complementarily to the ontological aspects of the human-tree relationship. Therefore, the chapter addresses the symbolic, religious, ecological, economic, socio-political, and affective aspects.

Chapter 3: The third chapter is structured around two axes. First, Donna Haraway's proposal is presented, incorporating its theoretical, methodological, epistemological, and ontological elements (e.g., 1988, 2004c, 2020g)³. Secondly, the ethical and methodological decisions that underpinned this research are explained in detail.

Chapter 4: The first section of this chapter describes the results of the ethnography based on key elements obtained from the ethnographic situational map (Clarke, Frieze & Washburn, 2015). Accordingly, it begins by narrating the reactions of visitors of Wertheimsteinpark to the absence of the Blood Beech, the changes in the landscape memory of the territory, and their bodily reactions. Subsequently, the process of resignification and interaction with the roots of the tree, which remained a few weeks after the felling, is detailed. Considering that there was a second moment of irruption of the landscape in which the roots were also extracted, the new reactions of the visitors to this second process of mourning and abrupt transformation of the territory are presented. Furthermore, elements are presented that account for diverse multi-species relationships in the Wertheimsteinpark. This includes both normative guidelines as well as dynamics of interaction with non-human agents. Another key category emerging from the Abstract Situational Map refers to the impact of the Blood Beech on the personal histories of humans and the discussion on the irreplaceability of the Blood Beech in affective and ecological terms.

Based on what has been established in the previous categories, the four types of narratives identified in relation to the felling of the Blood Beech are presented: official narrative, dissident narrative, passive narrative, and imagined narrative. This section also describes which elements

³ For details, see references.

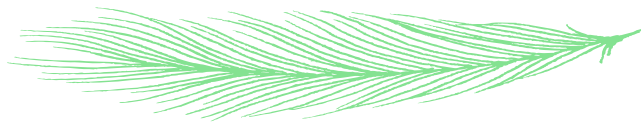


of these narratives enter in tension and/or resignation to explain the absence of the Blood Beech. Finally, the processes of transition from individual to collective narrative construction are made explicit. Specifying how park visitors discover or imagine themselves as a community.

The second section of the chapter interprets the ethnographic results from Donna Haraway's thinking (e.g., 1988, 2004c, 2020g)⁴. Accordingly, it is argued that the Blood Beech is a cyborg, an oddkin, and a semiotic-material node situated in Wertheimsteinpark. This park, it is understood as a sympoietic system, a multi-species meeting space, and a platform for thinking the Chthulucene narrative. Finally, it is shown how the narratives constructed about the Blood Beech emerge from a web of situated knowledges and Haraway's SF-methodological tool.

Chapter 5: This last chapter presents a synthesis of the empirical, methodological, and theoretical findings presented in the previous chapters, answers the research question, and presents an example of SF applied the narrative built around the Blood Beech.

⁴ For details, see references.



CHAPTER 1: General contextualization of the fieldwork: Introductory information about the Wertheimsteinpark, its visitors, and the Blood Beech

1.1. Introductory information about Wertheimsteinpark⁵

The Wertheimsteinpark is located in Döbling, a district of the city of Vienna, Austria, and covers an area of 59,860 square meters. Initially, in 1835, this area was a private garden. Later, Leopold von Wertheimstein bought the park and his villa. In 1908, Leopold's daughter Franziska donated the park and villa to the city of Vienna. During the 20th century, the park villa was transformed into the Döbling Museum and the Wine Museum (Stadt Wien, 2021). In morphological terms, it should be noted that the Krottenbach stream runs through the park and was vaulted, so the structure of the park slopes steeply towards Heiligenstädter Straße. The park also has a soccer and basketball court, a *Hundezone*, and a *Spielplatz* (Stadt Wien, 2021). The Blood Beech was located in the highest part of the park, right in front of the Döbling Museum.

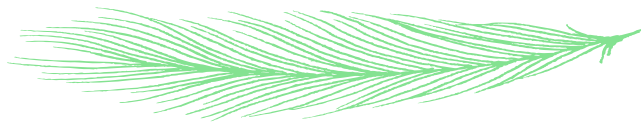
1.2. Wertheimsteinpark visitors⁶

Profiles of people who visit the park are varied and could be classified into different categories. There are people of different ages, clothing styles, phenotypical traits, and languages. On an average afternoon, during a tour of the park, you can see about 300 people or more.

The “ethnic landscape” of the park's visitors consists of a cosmopolitan profile of people living in Vienna, including people with African, Indian, Asian, and Austrian features, among others. In terms of clothing, there are people wearing sporty and casual western dress. There are also some women wearing hijab, Indian costumes, and even Japanese dresses.

⁵ The textual quotations extracted from the ethnographic diary were presented in the document “Coding of quotes from the field diary” (2022), for details see references in the section “Material generated in the research process”. Likewise, they retain the original language in which the ethnographic diary was written, and a unique code was assigned to each one.

⁶ The following field journal citations were used to construct this section: [DE24421VPPC1], [DE24421VPPC2], [DE24421VMRV1], [DE24421VPTDTV1], [DE1521VHDI1], [DE23421VHDI2], [DE4521VHDI3], [DE16421UIACE1], [DE16421UIACE2], [DE17421UIACE3], [DE19421UIACE4], [DE22421UIACE5], [DE1521UIACE6], [DE16421DPVM1], [DE14421PVMD1], [DE25421PVMD2], [DE26421PVMD3], [DE3521PEVFA1] (“Coding of quotes from the field diary”, 2022)

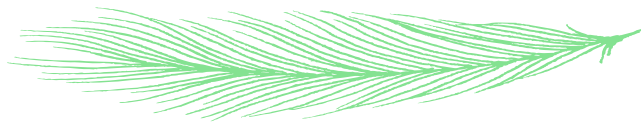


From the information gleaned from the ethnographic conversations, the visitors were either born in Vienna, migrated to Vienna, or had acquired asylum status. There were no participants who self-identified as tourists.

Regarding linguistic diversity, there were visitors speaking German, English, Hungarian, Spanish, Farsi, Arabic, Italian, among others. Given my language skills, conversations were initiated most of the time in German, and only when the speakers were using another language or they requested it, I used English. In some cases, Austrian visitors, upon learning that I was coming from Chile, switched to Spanish to practice that language.

Another interesting sub-profile to highlight refers to people who visit the park with their pets. People in this profile also incorporated their dogs in their stories about the Blood Beech, since they considered that dogs were also agents that interacted and had a relationship with the tree. Within these types of narratives, the role of the dog gained value in the human-tree relationship. Some examples of the incorporation of dogs in the narratives are observed in instances such as: First, in informants who sent photographs of the Blood Beech and/or roots in which their dog appeared in the foreground. Second, in informants who established conversations with me based on their dog approaching me. Such interactions culminated in talking about the Blood Beech. In this way, people visiting the park accompanied by non-human agents not only construct their argument from the multi-species experience, but also tried to incorporate what they believed would be their pet's perspective on the Blood Beech cutting.

At the same time, it is possible to classify visitor profiles based on their mobility status in the park. On the one hand, a “transient visitor” profile was observed, which refers to people who go jogging in the park, walk alone, or go for walks accompanied by others. On the other hand, a “static visitor” profile was observed, which consisted mainly of people sitting on a bench or lying on the grass. Within this profile, generally associated with people sitting on benches, a second sub-cluster of visitors is recognizable: “the McDonald’s”, this profile consumes this type of food and overflows the garbage cans at the entrance of the park. The McDonald’s people used the lower level of the park, i.e., the area bordering the *Hundezone* and did not visit the upper part of the



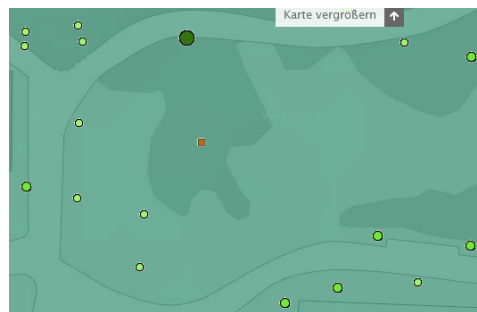
park. Therefore, they never entered my observation area and never participated in the ethnographic conversations.

In contrast, people who did participate in the ethnographic conversations often frequented my area of observation, so we coincided at different times during the fieldwork.

1.3. Particularities of the Blood Beech in the framework of trees in Austria⁷

This tree is a mutation of the Red Beech and is used in gardening (Bachofer & Mayer, 2006:32). The cultivation of this tree is done by cuttings and generates large roots, also called “elephant roots”.

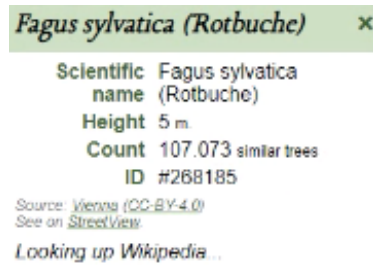
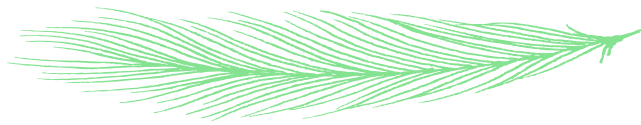
In the process of the fieldwork, I searched for information about this particular Blood Beech, however, most of the databases were updated, so the information about the tree had already been deleted. Despite this, through the public tree geo-reference system of the city of Vienna, the exact location of where the tree used to be could be extracted. As noted above, the Blood Beech was located on the top section of the Wertheimsteinpark. A close-up of this floor is shown below. The red dot represents the site of the Blood Beech.



(Stadt Wien, n. d. [Available in April 2021])

Additionally, in the OpenTree.org database, which shows an overview of Vienna's trees and the percentages of representation of the different species in the city, I found the following:

⁷ To construct this section, I used the quote [DE17421HSMHR1] from my “Ethnographic field diary” (2021) and the sources mentioned within the section (“Coding of quotes from the field diary”, 2022)



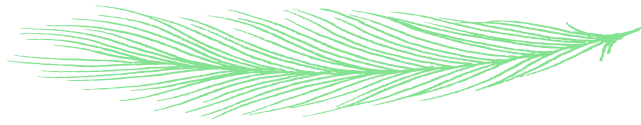
(OpenTree, n. d. [Available in April 2021])

Although the OpenTree.org data qualifies the Blood Beech as a Red Beech, this research will continue to name the protagonist tree of this story as “Blood Beech” since, on the one hand, this is how it was known by visitors to the park, and on the other hand, according to the data base of the City of Vienna, the tree was a Blood Beech – in German *Blutbuche* and in Latin *Fagus sylvatica Atropunicea*. Additionally, during the process of this research I had the opportunity to visit Red Beeches in other places in Austria, although they looked similar, but they were not exactly the same as the Blood Beeches planted in the Wertheimsteinpark.

However, for the review of historical and cultural accounts of trees in Austria, stories referring to Red Beeches were found. Hell's (2023) work seeks to link the Austrian arboreal landscapes with stories that account for historical, cultural, religious, folkloric, and mundane aspects between trees, forests or landscapes and the relationships with the locals of different territories in Austria. Among the trees highlighted in his book, there are stories that refer to Maple, the Grapevine, the Barberry, the Birch, the Yew, the Oak, Ash, Chestnut, Pine, Larch, Lime, Spruce, Elm, Willow, and of course the Beech, especially the Copper Beech or Red Beech⁸.

Regarding the Red Beech, I was struck by how Hell (2023:37) describes the tree. Within his description the most relevant thing is that this type of beech could reach 30 meters in height. Similarly, Red Beeches are characterized by their curved crown, late-appearing leaves, which are “crisp” on autumn walks. In addition, it is stated that beeches prefer nutrient-rich soils (Hell,

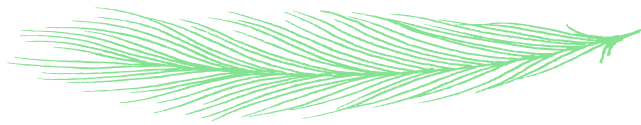
⁸ Complementary to those references, but focused on ecosystems identified with German speakers, one can review Woelm's (2017) work to delve into accounts of: Maple; Apple tree; Birch; Beech; Ivy; Yew; Oak; Alder; Ash; Buckthorn; Spruce; Ginkgo; Broom; Hornbeam; Hazel; Elder; Ilex, Holly; Chestnut, Horse Chestnut, Sweet Chestnut/Maroon; Pine; Cherry; Larch; Lime; Mistletoe; Poplar; Sycamore; Rose; Blackthorn; Fir; Elm, Elm, Rowan, Mountain Ash; Juniper; Walnut; Willow, Hawthorn.



2023:37). Additionally, the author makes explicit the useful character of the tree as a production resource, i.e., thanks to this tree artifacts such as:

„Galeerenruder, Achsenholz, Räderfelgen, Pflugbalken (von Wagnern und Stellmachern hergestellt), Scheffel, Trommelzargen, Käseschachteln, Kisten zum Verpacken von Kandiszucker, Bugholz für Millionen von dampfgebogenen Thonet (Nr. 14/1859) - und Kohn-KaffeehausStühlen [sic!], Absätze für Männer- und Frauenschuhe, Schlittkufen, Halsjöche fürs Hornvieh, Hornschulen, Tabakspfeifenköpfe“ (Hell, 2023: 37).

The multifaceted nature of how trees impact our lives as humans can be analyzed along several dimensions. The following chapter delves deeper into this topic.



Chapter 2: Background on human-tree relationships

This chapter presents a synthesis of discourses that allow us to understand the relationship between humans and trees from different perspectives. To present the information in an orderly manner, the discussions are structured into symbolic, ecological, economic, socio-political, and affective aspects. However, these dimensions in practice do not operate in isolation, but influence each other. Similarly, the form of expression and weighting of these dimensions will depend on specific geographic, historical, and ontological particularities.

2.1. Symbolic-religious dimension

2.1.1. Trees as a representation of life and access to the spiritual world

In the symbolic aspect, trees have played an essential role in the representation many of human religious beliefs⁹. This is because their condition as living organisms is ambiguous, being linked to a more abstract notion of life (Rival, 1998: 3; Brosse, 1998: 300)¹⁰. Consequently, the arboreal symbology allows addressing aspects related to the life/death relationship (Rival, 1998: 23–27)¹¹. A distinction should be made with respect to the parts of trees: wood, especially the trunk, is associated with the ambivalence of life and death. But roots, shoots, leaves, fruit and bark are associated with ideas of vitality, growth and regeneration (Rival, 1998: 21).

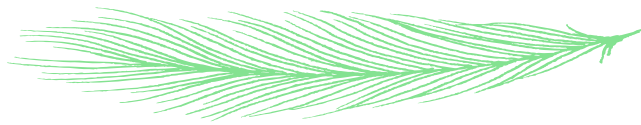
The above beliefs influence the creation of various tree cults. Although Frazer¹² (In Rival, 1998:4) could attribute this type of cult to a characteristic of ancient belief systems, today the cult of trees and the socio-spiritual interaction that humans have with them is present in several cultures:

⁹ The fact that arboreal symbolism is particularly important in the religious sphere is because, according to Bloch, trees represent life itself (Bloch, 1998: 44).

¹⁰ These ambiguities are associated with the concepts of life, vitality, and self-regeneration. They are explained by the fact that trees are biological organisms that seem to transcend death, since they could be considered as something alive and dead at the same time, that is, trees would not be “alive” – like animals, but precisely in a constant intermediate state (Rival, 1998:23–27).

¹¹ For example, in the Norfolk Forest the inhabitants consider their forest as a transitional space between life and death. These are repositories of souls awaiting reincarnation (Zelter, 1998).

¹² In the nineteenth century, Frazer and other researchers in the field of comparative religion wondered about different expressions of arboreal symbolic meaning in both classical mythology and the belief systems known at the time as “primitive religions”. For that scientific generation, the animistic and totemic ideas associated with trees were understood as an attempt to make sense of cycles of death and rebirth (Rival, 1998: 4). However, for Frazer and his colleagues, the cult of trees had no place in what he called “modern civilized worlds”, therefore, at the beginning of



In the case of Japanese culture, especially in the Kii Peninsula, the “*ki no bunka*” – tree worship – is reflected in aspects such as the construction of houses, shrines, and temples based on wood, the use of everyday artifacts – such as chopsticks – and the existence of many surnames and place names that refer to trees. The villagers in this region practice regenerative timber forestry. This form of forestry differs from modern timber plantations in that it recognizes trees as sources of supernatural support¹³ and essential to human subsistence-source of food, fuel, etc. (Knight, 1998: 197–199)¹⁴. Knight's ethnography (1998) exemplifies how wood, and even objects made from it, would still be “alive” to Japanese culture, therefore, cutting down a tree would be related to respect for the spirit of the tree.

In northern India¹⁵, the tradition of tree worship is still alive and well. For example, the city of Varanasi has many tree shrines. In this area, the most important sacred trees are: Pipai, Banyan and Neem¹⁶. These types of trees are considered as the house or body of gods – especially Shitala, the great Mother Goddess of Life. In the case of Neem¹⁷, it is also recognized for its historical

the twentieth century the religious role of trees was disappearing in the academic discussion (Harberman, 2010: 173–174).

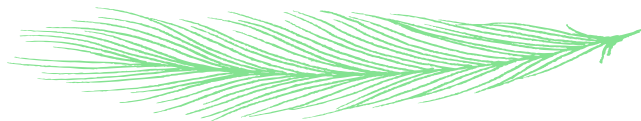
¹³ The supernatural role of trees, hence the respect for tree spirits is represented in the existence of the tree spirit commemoration rite “*mokerei kuyō*”. The purpose of this rite is to ensure that the tree spirits are laid to rest after the trees have been felled. Therefore, from the Japanese view, the felling and performance of the rite would be a way of caring for life (Knight, 1998: 204–205).

¹⁴ For Japanese culture, a tree has two lives: tree life in the forest and wood life. Within this frame of representation, Japanese foresters see themselves as “life bearers”, who advocate that it is only possible to give the tree a second life as long as it is cut at the right time. This second life will last exactly the same length of time as the first. Consequently, Japanese foresters come into tension with both modern forestry practices – which cut down trees too early – and modern conservation policies – which allow trees to be cut down only when they are too old. In both cases, the implementation of such logging would not respect the spirit of the tree and its possibility of living a second life (Knight, 1998: 213).

¹⁵ In other areas of India, such as the southwestern region of Bengal, the worship of sacred trees is recognized in some temples that ensure their protection: protective spaces are established in which sacred trees must remain without any human intervention (Sivaramakrishnan, 1998: 276).

¹⁶ According to Malla (2000. In Harberman, 2010: 188) in Indian culture, the sacred character of trees and the prohibition of cutting them down is an ancestral strategy to preserve the ecological balance. The association of trees with different deities was to save them from harmful agents and to motivate people to protect trees and forests. In the same way, it was established in religious scriptures that whoever damaged trees would pay an equal punishment – normally in the next life. So, despite the worship of some trees – the most important for the ecosystem – the worship of Pipai, Banyan and Neem has implied that people assume a sacred attitude towards trees in general (Harberman, 2010: 188-189).

¹⁷ There are several ways to worship the Neem, in some cases they are humanized by dressing them up and wearing masks. People also visit them by bringing offerings such as water, hibiscus flowers and incense. Humans worship neem trees because they believe that these trees can fulfill wishes associated with achieving a good quality of life – good food, good health, healthy family relationships and happiness (Harberman, 2010: 173–180).



value in Ayurvedic medicine, since many medicinal preparations include substances from this tree (Haberman, 2010: 177–179).

In the case of the Quechua people, whose religion is presented as a way of life in harmony and mutual respect with the deities of nature, especially Pacha Mama. The worship of trees is represented by the relationship with Sacha Mama, the mother of all trees, who together with other beings of nature shape the world. The holistic conception of the interaction between the beings of nature implies a practical recognition of the contributions that each being makes to the ecosystems. In the case of the role of trees and the forest, these are considered as the lungs of the world, allowing the life of other plant and animal beings (Palomino, 1993: 75–86).

From the examples of the Norfolk people, the Solomon and Lau archipelagos¹⁸, the Benares and Bengal areas of India, the Japanese culture on the Kii peninsula, the Quechua people, the Skokomish¹⁹, the Daur Mongols²⁰ and the northern Lio communities in Indonesia²¹, it can be seen how human-arboreal relations can be understood from a religious and spiritual perspective whose ontological assumptions incorporate supernatural aspects that affect human behaviors²².

At the same time, the symbolic relationship of trees is materialized in rituals associated with human life cycles. According to Rival (1998: 12), this is because the longevity of planted trees

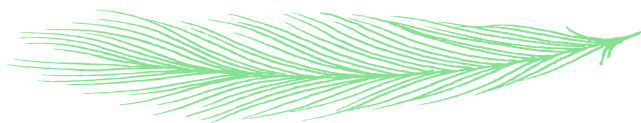
¹⁸ For the inhabitants of this area, trees were the first inhabitants of the Earth, therefore, they are considered sacred beings that must be protected. Within this cosmology the world is, above all, a spiritual world, consequently, only priests could decide on the use of medicinal plants and trees. Therefore, the spiritual dimension of understanding the world translates into practical aspects that regulate the interaction between humans and other beings in nature, including trees. For example, it was completely forbidden to use hardwood, wood from fruit trees and wood from sacred trees as firewood. The use of nature beings should always be with respect and harmony since humans understood themselves in community with nature and not above it (Paulzen, 1993: 113–114).

¹⁹ The Skokomish have ritual, meditation and spiritual cleansing practices related to the forest, especially cedars. The promotion of cedars as sacred trees has allowed them to protect the forest from massive logging and thus defend their ancestral sacred lands (Mauzé, 1998: 242–246).

²⁰ The Daur Mongols recognize trees as spiritual beings. For them old birches later become spirits (Humpherey, 1996. In Rival, 1998: 28).

²¹ Communities in northern Lio believe in the existence of the Nitu, spiritual beings of the trees. The Nitus are venerated in various ways including rituals where trees have been transformed into artifacts or consumer products. For more details see Howell, 1998: 163–172.

²² According to Mauzé (1998: 244–245), in all the peoples of the earth, there is a story in which “the creator” planted a Sacred Tree where the members of the people could gather to find security, wisdom, power, healing, love, justice, generosity and all kinds of positive attributes that represented what “the creator” gives to the people. This tree had to be big enough so that its branches connected to the sky and the roots to the earth. Therefore, a tree would become sacred from the symbolic characteristics it manifests.



allows establishing symbolic connections with ideas of origin, vitality and fertility. Examples of this are observed in the childhood rituals of the Kwakiutl²³, the initiation rituals of the Ankave in New Guinea²⁴, marriage rituals in Japan²⁵, funeral rituals in Nusa Penida and Bali²⁶, and funeral rituals in Romanian folklore²⁷.

Similarly, the symbolic dimensions of trees are associated with practical dimensions: trees are sacred because species need each other to live and reproduce. Therefore, 'sacred' trees influence both the survival of nature and the survival of cultural religions of different peoples (Mauzé, 1998: 244). The vital symbolic aspect of trees is not only present in religions, but also in western green politics, since there is a recognition of their contribution to the ecosystem in general (Rival, 1998: 16).

2.1.2. Different levels of arboreal symbology

In addition to the religious dimension of trees and the role they play in the preservation of ecosystems, there are other prisms from which the impact of arboreal symbology in relation to humans can be analyzed. According to Rival (1998: 24) the relationship between life and arboreal

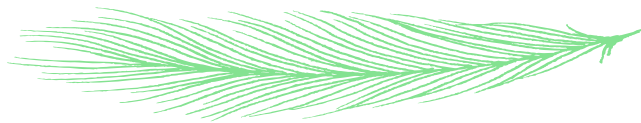
²³ The kwakiutl buried the placenta of the newborn at the foot of a cedar tree – a tree that lives for many years – or wrapped the placenta in the bark of this tree. This practice was celebrated to guarantee good health for the baby (Boas, 1921, in Mauzé, 1998: 237). Once the placenta was absorbed by the cedar, it was considered that the tree helped the newborn to have a stronger bond with life, therefore, it was time to give the baby a name (Walens, 1981. In Mauzé, 1998: 237).

²⁴ The symbolism of trees is present in the male initiation ceremony of the Ankave in New Guinea because they are associated with maturation (Bonnemère, 1998: 127).

²⁵ In Japan, weddings and plantings are celebrated in the spring. The bride and groom are expected to plant trees. In parallel, when a daughter is to be married, the fast-growing tree that was planted on the day of that daughter's birth is cut down. With the wood from this tree a chest of drawers is built for the daughter's dowry. The symbolic character of this rite refers to the life cycle of people. In this case, the felling represents death. According to tradition, daughters should be "cut down" for them to become reliable and lasting wives (Knight, 1998: 204-207). Thus, there is an analogy between the first tree life – daughter –, and then the wood life – wife.

²⁶ For the inhabitants of these regions, coconut trees are special agents in birth, marriage, and funeral rites (Giambelli, 1998: 154). This same tree is also present in funeral rituals in southern India. The coconut tree is planted on the grave because it symbolizes the life force of the ghost of the deceased. In cases where funeral coconut trees – Paala – or groves – Kaavu – grow without human intervention, i.e., arise naturally, it is believed that the spirits manifest themselves with an uncontrollable and powerful life force (Uchiyamada, 1998: 180).

²⁷ In Romanian folklore, fruit trees are present in marriage and death rituals. Similarly, when young people die before having a coffin, a symbolic marriage is performed between the deceased and the pine tree (Bouras, 1977. In Rival, 1998: 8).



symbols can materialize at different levels: individual, interpersonal relationships, social groups, and life itself. The different levels are briefly presented below:

In relation to the individual level, Mary Douglas (1970. In Rival, 1998: 2) conceives trees as natural symbols that refer to both the body and the mind²⁸. Analogies between the human body and the arboreal body have also been mentioned by other authors²⁹. Rival (1998: 9) also recognizes symbolic correspondences between human and tree body parts, but stresses that differences between arboreal and human bodies can also be symbolically valued by humans³⁰. From these analogies, humans project onto trees aspects necessary for individual mental and psychological stability, such as protection, stability, resilience, hope, and reinvention.

Regarding the level of interpersonal relationships, the use of tree metaphors to represent family life and genealogical connections is common (Rival, 1998:11)³¹. Knight's (1998) ethnography portrays the importance of trees in different ways of understanding Japanese family interactions³². In it, forests are conceived of as family continuity in both abstract and practical

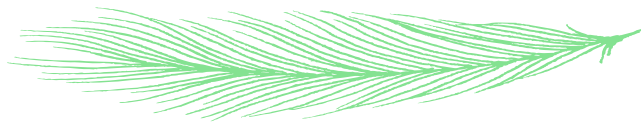
²⁸ Regarding the mental plane, the symbolism of the tree: *"...binding and grounding us with its roots; sheltering and protecting us within its branches; raising our spirits at the same time as stabilizing our feet in the mud of the earth: giving us strength and resilience in its sturdy trunk; feeding and nurturing us with its fruits; giving us everlasting hope in the constant regeneration and rebirth of its seeds"* (Zelter, 1998: 222).

²⁹ For example, Jones (2015: 124) indicates that verticality is an aspect that unites human bodies and arboreal bodies, as both are "vertical beings" with trunk and limbs. For Norkunas (2017: 171) arboreal symbolism is anthropomorphic since there are associations between sap and blood, leaves and hair, branches and arms, bark and skin, and arboreal trunk and human trunk (Norkunas, 2017: 174).

³⁰ The corporeal differences between humans and trees that influence symbolic representations are: 1) long arboreal longevity v/s short human longevity; 2) use of their materiality over time - trees transform into wood and wood transforms into durable artifacts, humans cannot; 3) trees are "immobile" and humans are animate beings; 4) the structure of trees – trunks – continues to increase throughout their lives v/s the structure of humans – bones – they grow only until they reach maturity, then shrink and rot after death (Bloch 1998: 42).

³¹ For example, tree metaphors are used to represent genealogical connections in family lineages: the ancestors are represented by the roots and the descendants by the branching of the tree and its fruits. This same system is also used in linguistics to understand the links between different languages (Fernandez, 1998: 87).

³² In the first place, child rearing is understood on the basis of forestry metaphors. Thus, the idea that some branches must be pruned so that the tree grows straight is used as an example to discipline daughters (Knight, 1998:200). Secondly, forestry is understood as an expression of intergenerational duties and rights. The forest is thus not a commodity, but an inheritance from the ancestors. Therefore, selling the forests is completely intolerable. In case of economic hardship, one can sell one's belongings, house and land for agriculture, but never the forests, since these represent the place of gratitude towards the ancestors, and to sell them would be to denigrate the effort of the grandfathers and grandmothers (Knight, 1998: 208–209).



terms, as they will be the wood from which the family dwelling will be constructed³³ (Knight, 1998: 210–212).

At the level of meso-social groups, the tree is a powerful symbol because of its power to evoke political discourses³⁴, legal definitions, and institutional categorizations that represent social actions that give meaning to social life. Therefore, it is related to the creation of moral communities and corporate bodies that sustain them (Rival, 1998: 25–26)³⁵.

With respect to the level of life itself, the biological characteristics of trees make it possible to convey ideas of growth, strength and longevity and chronological continuity of life (Mauzé, 1998: 237). Similarly, trees are representatives of the idea of nature and its cycles, which is expressed in the transformations of their bodies in the seasons of the year (Duempelmann, 2019: 49)³⁶.

By way of synthesis, in the previous pages it was observed how arboreal symbolism is present in different dimensions of human life. On the one hand, arboreal symbolism allows representing ideas of life, death, cycles, interpersonal and social relationships. On the other hand, arboreal symbolism is present in the development of religious ideas that stimulate the execution of rites and moral communities that promote a practical attitude of environmental care.

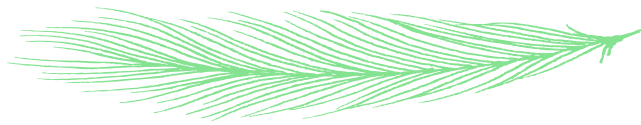
2.2. Ecological dimension

³³ The trees are understood as an element of family continuity that surpasses the biological lives of the family members; therefore, they are symbolically and practically an expression of genealogical transcendence. The symbolic part would correspond to the abstract connection with the ancestors, the practical part would refer to the fact that the wood to build the house comes from trees that the ancestors cultivated for that purpose for later generations. Therefore, the beams that support the houses would be a bridge of connection with the spirits of the grandparents (Knight, 1998:213–214). For more examples of this relationship, see Knight, 1998: 210–212.

³⁴ Arboreal symbolism also allows us to understand abstract models of social functioning, impacting the establishment of moral community and political discourses. In Europe, for example, trees have been present in social memory and myths about both sacred aspects of nature that have survived for centuries as well as the expression of certain communities that give meaning to their identity (Schama, 1995. In Rival 1998: 19). The verticality of trees has also inspired the design of religious architectures, such as European Christian Gothic cathedrals (Jones, 2015: 124). Consequently, arboreal symbolism has presented juxtapositions in both the political and religious spectrum (Rival, 1998: 20).

³⁵ For example, ecological-spiritual activist communities advocate that trees are a source of energy, peace, and a force of inspiration for environmental struggles (Rival, 1998: 20).

³⁶ The details of both phenomena were previously explained in the section on “Trees as a representation of life and access to the spiritual world”.

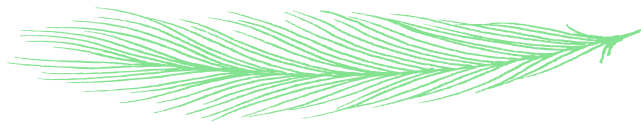


As noted in the previous section, the cult of trees was accompanied by a practical function for the care of the environment. This is due to the recognition of the ecological services provided by trees³⁷. The valuation of tree services motivated the creation of urban forests. Initially these creations were supported by narratives of climate regulation and maintenance of human health, and later included forms of interpretation of urban places. This implied that the discourse of protecting this type of spaces was transformed into an institutionalized and governmental practice (Van Herzele, 2015: 53–59).

Given this interpretative shift, urban forests are described as green areas with a balanced mix of enclosed and open landscapes, which respond to the needs of urban dwellers, and are part of a local community. Such forests can also assume structures of “parks” and “natural areas” (Ledene et al. 2011. In Van Herzele, 2015: 58). It should be noted that the contribution of urban forests not only responds to the generation of ecological services for humans, but also for avian populations³⁸. Especially for birds that have migratory routes, green spaces are understood as oases or sanctuaries of welcome in their passage through the city (Duempelmann, 2019: 76).

³⁷ Some of the most relevant ecological services are: Cleaning the air through filtering air pollutants, cleaning the water through filtering chemicals in waterways, protecting fish life – and fishing activity – through eutrophication mitigation, flood control services, stimulating suitable habitat for different animal species – including endangered species, regulating temperatures during summer, capturing carbon dioxide, improving the aesthetics of places, contributing in cultural and recreational spaces (Hudson, 2015: 68–69), protection against soil erosion and prevention of avalanches and avalanche-associated destruction (Queme-Chay, 1993:52), provision of food, shade, firewood, building materials (Bass, 2015: 94), among others.

³⁸ In the New York case, the urban forests associated with the most important “aviaries” are: Central Park and Harlem Meer, Riverside Park, among others (Duempelmann, 2019:76). It should be noted that despite the ecological services provided by trees, in 1945 there were humans who opposed the advancement of urban forestation policies since they considered that trees did not belong urban spaces, since the attraction of birds dirtied the city and that trees interfered with the aesthetics of the most important buildings in the city (Duempelmann, 2019:91).



Examples of how urban forests are institutionalized as part of forest policy are addressed by Van Herzele (2015), who refers to the case of Flanders, Belgium³⁹; and by Duempelmann (2019), who made a comparison of urban forestry processes between the United States and Germany⁴⁰.

In all three examples, the urban forestry discourse gained momentum in the 1970s⁴¹. From this, debate was generated regarding what type of trees were most suitable for cities and under what conditions they should be committed to growing them (Duempelmann, 2019: 3–4)⁴².

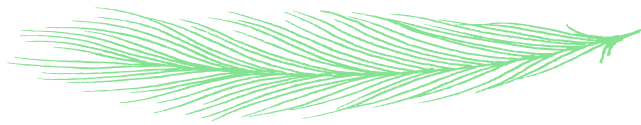
Accordingly, trees had to be grown in specialized nurseries that guaranteed straight and healthy stems, symmetrical crowns, and compact and fibrous roots. A good tree was one that fulfilled three functions: Beauty, comfort, and increased property value (Duempelmann, 2019:39). Other issues in urban forestry debates, associated with higher levels of abstraction, refer to: to what extent trees and forests can be considered as natural beings and to what extent their presence is the result of historical and ecological processes (Rival, 1998: 24); the problems caused by tree

³⁹ In this place, the urban forestry debate was strongly activated in the 1970s and materialized in the 1990s. At that time, the State was accused of not doing enough for not carrying out a forestry policy that would allow the preservation of forests and it was necessary to recover the level of forestation that existed in 1846. In this context, the creation of urban forests was proposed as a strategy of “social consensus” and “scientific research” in which the reforestation process should begin in the city itself. From this, urban green spaces, in general, and the urban forest, in particular, were exhibited as key elements for the shaping of urban structures and the search for a more pleasant environment for urban dwellers (Van Herzele, 2015:48–53). The implementation of this policy was not without tensions, in the case of the Ghent Forest Park, there were local inhabitants who opposed it (Van Herzele, 2015: 58–59).

⁴⁰ Although the discussion on the ecological services of trees begins with the First World War, due to the need to ensure the autarky of the territory, the debate gained momentum in the 1970s in both East and West Germany. Both scientific communities emphasized the importance of urban forest cultivation. The differences centered on the type of tree and how to respond to the controversies of tree-bird-human relationships (Duempelmann, 2019: 13–14 & 232–248). For more details, read Duempelmann, 2019.

⁴¹ In the particular case of the United States, the discussion on the existence of trees in the streets began in the 1910s, when the physician Stephen Smith carried out the campaign “Trees can save lives”, in which he sought to plant trees to reduce high temperatures – causing a high rate of infant mortality due to diarrhea. In the following decade horticulturists campaign to generate urban planning that is suitable for tree survival (Duempelmann, 2019: 24–25 & 119). For more details, read Duempelmann, 2019.

⁴² Consequently, tree experts indicated that trees should be chosen that were able to withstand atmospheric pollution, road salt, but at the same time had specific physiological characteristics such as fast growth and narrow crowns (Duempelmann, 2019: 3–4). Controlling the verticality of the tree body was also considered a relevant factor (Jones, 2015: 124).



behaviors (Sandberg, Bardekjian & Butt, 2015:9)⁴³; and the problematization of the categories “nature” and “forest” (Davis & Burke 2011. In Shani, 2017: 636⁴⁴, and other authors)⁴⁵.

Similarly, urban foresters had to pay attention to the processes of tree growth, decay and death. Also, they had to choose a variety of species to plan the urban tree system, since, in addition to aesthetic aspects, it was a precautionary measure against insect pests that could potentially ruin all urban trees in the same period (Duempelmann, 2019: 45).

From the above background, urban forests are understood as the result of a technoscientific production where the ecological contribution of trees is considered as agents that improve urban conditions. This process has been accompanied by political campaigns and scientific debates that seek to maximize the benefits within the framework of urban forestry productivity, prioritizing aspects such as biodiversity and aesthetics (Duempelmann, 2019: 243–249).

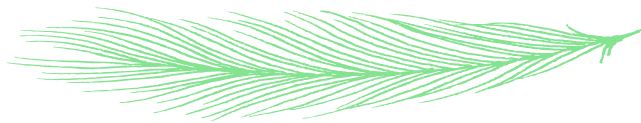
Synthesizing, this section showed the role of arboreal beings from an ecological point of view. Specifically, processes where trees are recognized in human narratives based on the importance of the ecological services they provide. From the perspective of political ecology⁴⁶, urban forests are arbitrary human constructions with biological characteristics that respond to the interests of human actors such as politicians, ecologists, scientists, residents, etc. (Sandberg, Bardekjian &

⁴³ Trees can also influence the urban environment by developing extravagant, unpredictable and unintended forms that transcend the will of humans attempting to control them (Sandberg, Bardekjian & Butt, 2015: 9).

⁴⁴ Such concepts are loaded with preconceptions about how the environment should be and what functions they should fulfill. The conditions for this respond directly to the environmental imaginaries of the given historical context (Davis & Burke 2011. In Shani, 2017: 636).

⁴⁵ The argument that the binary division between nature and culture is false is strongly developed by Ingold (2011: 4). Shani (2017: 633) presents the example of planted acacias: On the one hand, these trees present themselves as “authentic” nature but at the same time, by the mere fact of being in urban space, they constitute themselves as a cultural artifact. This species, then, would be in an intermediate space between “nature” and “culture”. For Duempelmann (2019: 5) this situation would be resolved by transcending the artificial distinctions between the categories “rural”, “urban”, “natural” and “cultural” since cities became naturalized and trees became urbanized during the 20th century. For Amin and Thrift (2002. In Jones, 2015: 114), cities have always been part of nature because of the existence of animals, microbes, fungi, etc.

⁴⁶ Political ecology is defined as the study of the dynamics that emerge in the interactions between humans and more-than-humans (Sandberg, Bardekjian & Butt, 2015: 1–5). The analysis of these interactions incorporates historical and socioeconomic elements, political decisions, material processes, and ecological behavior, among others.



Butt, 2015: 6)⁴⁷. The following sections will elaborate on the economic, political, and affective dimensions of such interactions.

2.3. Economic dimension

In Western contexts, urban forests are the product of property relations and economic capital⁴⁸: planting trees raises the value of land. Complementarily, access to these commodities – urban forests, private trees – is determined by factors such as social class, gender, ethnicity, culture, and race⁴⁹. Indeed, while the cultivation of shade trees is a matter of priority for the middle and upper class (Perkins, 2015: 20–31), poor areas present notoriously less arboreal presence (Sandberg, Bardekjian & Butt, 2015: 1; Perkins, 2015: 25–31).

Complementarily, in the second part of the twentieth century, the development of concepts such as “green seal”⁵⁰ or “green city” have also been incorporated into the dynamics of market and capitalist growth – as these types of categories are a source of tourist attraction (Sandberg, Bardekjian & Butt, 2015: 1). It is worth noting that the neoliberal definition of “green”, while generating economic profits, does not guarantee characteristics of biodiversity, local identity, and sustainability. The example of Singapore⁵¹ shows how, even if there were consensus for promoting a “green” urban landscape, there are different socio-environmental narratives versus what is meant by greening (Gulsrud & Ooi, 2015: 88-89).

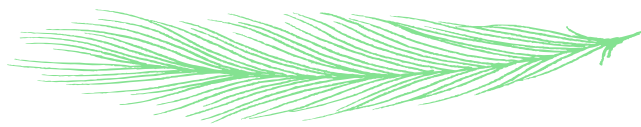
⁴⁷ Especially in urban forests the ecological dimensions of trees intersect with cultural, political, and ecological aspects. These aspects influence decisions about what type of tree to grow in urban spaces, how an urban green space is imagined, and what controversies emerge in daily human-arboreal interaction (Jones, 2015: 113).

⁴⁸ In capitalist environments trees are treated as mere commodities because they are produced and sold by nurseries, bought by distributors, and subsequently purchased by private owners and organizations (Perkins, 2015: 20–22).

⁴⁹ “...discrimination in commodity markets based on race/ethnicity, socio-economic standing, and gender prevents many people living in cities from benefiting from urban forests” (Perkins, 2015: 20), since the spatial distribution of different social groups in the city is also mediated by these factors.

⁵⁰ For example, the promotion of “green” campaigns for humans to adopt individual strategies in the face of environmental problems using a “consume with recycled material straw”, “grow your tree” style, but in which civic and collective forms of participation that have a bearing on urban forest management are evaded (Campbell, 2015: 244).

⁵¹ Singapore as a “Garden City” was a government policy that basically sought to eliminate the local ecology – whose landscape generated little economic value – and replace it with an exogenous green brand. The results of this greening process generated high levels of discontent from locals, as this form of nature did not represent them and threatened local biodiversity. In the face of protests and citizen movements, the green project was transformed (Gulsrud & Ooi, 2015: 81–88). For more details of the transformations made read Gulsrud & Ooi, 2015.



For its part, the management of “green” in market relations does not only contemplate human and plant factors, but the influence of technologies also impacts the production and management of “goods”. In the field of urban forestry, the most relevant technology is I-Tree, a computerized forest management system that is produced and reproduces neoliberal logic (Duempelmann, 2019: 248)⁵². This system does not value the ecosystemic or cultural services of urban forests, nor the existing biodiversity, nor the social and psychological impact produced in the relationship between trees and human communities (Konijnendijk van den Bosch, 2015: 43)⁵³.

In synthesis, environmental management and innovation efforts are highly influenced by power relations, social discourses and market valuation norms in accordance with the neoliberal system. The urban forest is quantified⁵⁴, monetarized, and promoted according to the economic benefits provided by its territories. Consequently, computer tools are created to manage and prioritize trees that respond to the anthropocentric demands of “green” neoliberalism and are beneficial for investments (Campbell, 2015: 256). The discussion of how one reacts to this is political.

2.4. Socio-political dimension

This section shows some aspects that have marked the human-tree socio-political relationship based on two sub-dimensions. First, human agency in urban forests and, second, arboreal agency in urban spaces.

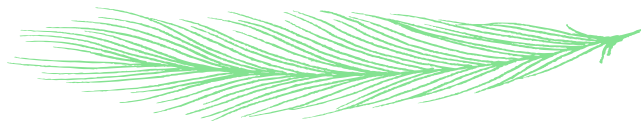
2.4.1. Human agency in urban forests

Within the framework of political ecology, urban forests and trees have been the focus of interest of this discipline and have generated great challenges that urgently need to be solved, such as,

⁵² In other words, I-Tree technology is a software program developed by the United States Department of Agriculture (USDA) Forest Service. This program estimates the economic value of urban forests and allows the processing of information to quantify the economic benefits according to the type of ecological service provided by a given urban forest. Today, this program is marketed and applied worldwide, and is especially popular among urban forest managers. In this context, the neoliberal logic rates urban forests from the operationalization of ecological services that have monetary implications from given characteristics and excludes the singularities of local management practices and knowledge associated with trees in the respective territories (Sandberg, Bardekjian & Butt, 2015: 3–6).

⁵³ Interestingly, the system has also served to deliver figures that have enabled tree advocacy (Duempelmann, 2019: 248).

⁵⁴ The contemporary heyday of green governance has meant further “technification” and commodification of trees as if they were any other architectural element of urban infrastructure (Konijnendijk van den Bosch, 2016: 181).



thinking about more inclusive forms of urban forest management⁵⁵, rethinking the look of education and environmental justice, among others (Sandberg, Bardekjian & Butt, 2015: 1–5).

The development of more inclusive urban forest management had to integrate the agency of a wide range of human groups and interests that until then had been marginalized⁵⁶ from management models⁵⁷ (Konijnendijk van den Bosch, 2015: 36–37; Perkins, 2015: 20). Consequently, today models are created where civil society is involved in strategic decisions, management and maintenance of urban green spaces (Konijnendijk van den Bosch, 2015: 40)⁵⁸. Similarly, green areas are not only seen as recreational meeting places, but also as fertile ground for the activation of social movements (Akbulut, 2015: 236–237)⁵⁹.

With respect to environmental education and justice, we recognize the presence not only of governmental actors and social movements, but also of various civil society organizations that

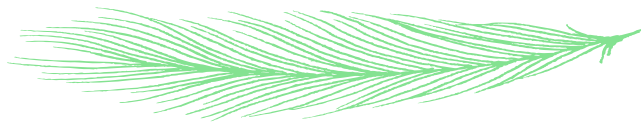
⁵⁵ Today, and thanks to the struggles of different actors, urban forestry seeks to overcome its elitist era by incorporating associative and participatory dimensions where civil society, in general, and local residents, in particular, are included (Konijnendijk van den Bosch, 2015: 40).

⁵⁶ For example, in the USA, women had been marginalized at the beginning of the discussion on urban forestry ecology and its forestry policies. The female presence – management and direct work with trees – was taking place from women's movements (Perkins, 2015: 28). For these movements, women took urban trees as a symbol of empowerment, emancipation and resistance (Duempelmann, 2019: 15); female protests were activated against the “male business world” that had real estate construction plans in spaces that belonged to trees – for example Riverside Park (Duempelmann, 2019:70); and street trees were constituted as a form of environmental ethics promotion that was later linked to second wave feminism (Duempelmann, 2019: 96). Consequently, the female presence in urban forestry implied foci of activating feminisms, and in parallel, changes in the dynamics of urban forest governance that went in favor of an environmental ethic and protection of arboreal beings.

⁵⁷ Another example refers to the case of Bedford-Stuyvesant, where African American citizens, through tree planting campaigns, strengthened their social fabric in the context of the civil rights movement. Trees consequently became a means of community empowerment and emancipation (Duempelmann, 2019: 97–98). Then – as in the example of the female presence – the promotion and care of green spaces assumes a political role that strengthens empowerment processes that transcend the merely silvicultural aspect: the role of trees is integrated as a form of political and citizen struggle.

⁵⁸ This includes actions related to private and public trees.

⁵⁹ For example, in 2013 a real estate construction project emerged for a shopping mall that was going to destroy the Gezi Park in Istanbul. The situation initially summoned environmentalists, and later, different fields of social critique that were articulated into a large political movement that included more aspects of the state-capital-environment relationship. Gezi Park became a platform of resistance in which activists of different kinds - anarchists, feminists, socialist left, LGBTQ+, Kurds, anti-capitalist Muslims, among others activated their political-activist potential (Akbulut, 2015: 236–237).



have been created to promote these issues, for example, the Arbor Day⁶⁰ and MillionTreesNYC campaigns⁶¹.

In summary, although urban forestry had an elitist origin, different social groups have appropriated the use, management and protection of contemporary urban forestry spaces. This has generated changes both in forest governance and in the activation of new political and social demands. Likewise, it has activated the promotion of educational and environmental justice campaigns aimed at increasing and strengthening the presence of urban trees. Consequently, urban tree presence is a product of political and citizen interactions where different human actors assert their interests in local governance processes.

2.4.2. Trees as political agents

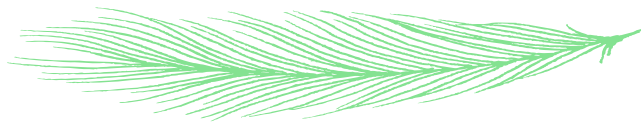
The debate around urban forest management considers trees as living organisms that require governance (Braverman, 2015: 133–134)⁶². Trees and forests are difficult agents for human management to predict (Sandberg, Bardekjian & Butt, 2015: 2–6)⁶³. Urban tree plantations are often contentious because they occupy contested terrain for both humans and trees

⁶⁰ For Arbor Day, various organizations coordinate theoretical-practical and voluntary educational activities for citizens to be trained in inventorying, maintaining, planting and monitoring their own forests (Perkins, 2015: 29). Also, Arbor Day is seen as an opportunity to raise funds to plant and protect trees and conduct campaigns to denounce and prosecute tree vandalism (Duempelmann, 2019: 28).

⁶¹ MillionTreesNYC was a public-private initiative in which the New York City Department of Parks and Recreation (DPR) partnered with the non-profit New York Restoration Project (NYRP) to plant and care for one million trees. The campaign lasted for 10 years – until 2017 – and involved more than 100 environmental organizations (Campbell, 2015: 242).

⁶² For urban forestry bureaucrats and managers, trees should have order and discipline. Despite the policies implemented in this regard, trees are resistant and act in a disorderly manner above and below ground. Control of tree bodies can be carried out above ground through pruning, but below ground there is arboreal anarchy: roots cannot be planned, are unpredictable, and wreak havoc on human subway connection systems (Braverman, 2015: 139–140).

⁶³ Some examples refer to the contraction of diseases; attraction of insects; falling during strong winds and storms; expulsion of leaves, fruits, seeds and debris; overgrowth in canopies and roots, impacting housing infrastructure, pipes, electrical connections, sewage, building foundations and all kinds of aspects that disturb humans (Sandberg, Bardekjian & Butt, 2015: 2–6).



(Duempelmann, 2019: 12)⁶⁴. Indeed, trees can act unexpectedly in the face of human-constructed norms and, consequently, over humans (Braverman, 2015: 143)⁶⁵.

The agency of trees is expressed in different dimensions such as: their physiological functioning – associated with movement, reproduction, and propagation; impact of their presence in places⁶⁶; and generation of affective responses in humans who relate to them (Jones and Gloke, 2002, 2008; Jones, 2015. In Konijnendijk van den Bosch, 2016: 181)⁶⁷. Such agency also influences the narratives⁶⁸ – and counter-narratives⁶⁹ – that humans construct in relation to trees⁷⁰.

Therefore, like humans, trees cannot be politically neutral. They are intertwined with political, economic, and legal processes (Jones, 2015: 116). Trees are non-human actors that despite being considered as “nonreflective entities” affect and stress environmental governance. They, in their interaction with local humans trigger collective actions in case of tree threats and damage (Konijnendijk van den Bosch, 2016: 176).

⁶⁴ On the one hand, humans want to use space according to a functional design for them; on the other hand, electrical cables, above and below ground, subway, gas pipes, street widening, arboreal vandalism, and the use of trees as advertising columns cause distress to street trees (Duempelmann, 2019: 12). In parallel, there are controversies among foresters in terms of the choice of tree species for cultivation. While some prefer native specimens – argument of conservation and promotion of local ecology; others opt for exotic specimens – argument of ease of growth and management (Sandberg, Bardekjian & Butt, 2015: 2; Duempelmann, 2019: 42).

⁶⁵ For example, in Ottawa, after planting thousands of trees for an urban forest project, they had to remove them and even make a list of prohibited species due to their rapid growth (Dean, 2015: 167).

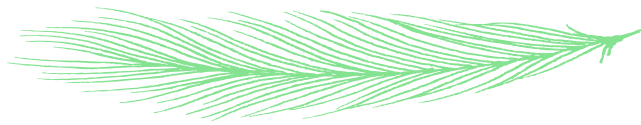
⁶⁶ This is expressed by the idea that trees can reclaim vacant land (Konijnendijk van den Bosch, 2016: 182); change the perception of the city due to their micro-climatic benefits (Duempelmann, 2019: 179); and their role contributes to the sustainability and resilience of urban spaces (Jones, 2015: 114).

⁶⁷ For example, in the Lappersfort Forest in Bruges, Belgium, people organized when they heard of the threat that the tree could be removed from the site. As a result, protests were organized and a community set up a camp to protect the forest. A subculture of “forest dwellers” was generated who stayed there and only occasionally went to the city. Out of love for the trees, humans transformed their ways of life to protect it (Konijnendijk van den Bosch, 2016: 183).

⁶⁸ One of the most common narratives refers to urban trees selflessly providing services – especially shade – to the city and its human inhabitants (Dean, 2015: 162–166).

⁶⁹ Similarly, the most common counter-narratives regarding urban trees refer to them being a difficult to control and problematic alterity, as they: litter; do not keep up to expected standards, or grow too much, or grow in the wrong direction, or generate too much shade, or damage sidewalks, wires and other infrastructure, or emit allergenic substances; etc. (Dean, 2015: 166–172).

⁷⁰ Despite the narratives and counter-narratives we humans tell ourselves about trees, trees pursue their own purposes (finding water, capturing sun, reproducing). Acknowledging their purposes, even though these are problematic for humans, also implies understanding that modern cities are affected by more-than-human agencies (Dean 2015: 171–172).



In short, trees are understood in both directions: on the one hand, they are the product of socio-political decisions in urban space, and on the other, their agency impacts the construction of urban space and human behaviors. In both cases, their interaction dynamics always have a political dimension. Consequently, urban ecologies are a social, political, cultural, and historical web whose landscape is transformed by both human and non-human agencies (Hammond, 2015: 208).

2.5. Affective dimension

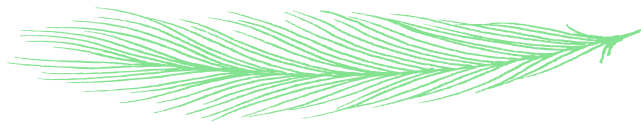
This section explains the basic notions of the affective turn and its contribution to the understanding of the emotional relationships between humans and trees – in which trees are understood as subjects of affection. Finally, examples of human-tree relationships in which each tree is considered a unique and individual are presented.

The affective turn argues that bodies, as bridges of senses, movements, and contacts, are an essential aspect of constructing affectivity (McCormack, 2007. In Jones, 2015: 116)⁷¹. This claim is based on three assumptions: First, that the use of bodies transcends consciousness, thought and reflexive language. Second, that bodies are “channels” that through their interaction stimulate affective life engagements and processes. And third, that affect makes us see other beings as embodied beings rather than virtual minds (Thrift, 2008. In Jones, 2015: 117). Consequently, our senses of touch, hearing, smell and all kinds of sensory activation stimulate emotions and relationships (Sandberg, Bardekjian & Butt, 2015: 9).

The affective turn has led to a deeper understanding of the relationship between humans and trees. This is expressed in several ways: First, the recognition that humans pay attention to trees as “palpable living beings” and manifest sympathy for them⁷². Second, affections towards places

⁷¹ From this perspective, affectivity would depend more on the interaction of bodies than on language.

⁷² The corporeality of trees, their presence and agency imply continuous exchanges that converge in ecological networks of affective registers – perception, movement, memory, and emotion. Such registers reflect life “in the raw”, operate subconsciously, and evoke feelings and emotions that transcend language and rational thought. Consequently, trees – and other bodies in nature – stimulate affective registers similar to processes that emerge in interaction with music or other sensory art (Jones, 2015: 118–119).



would be highly influenced by trees, as they are protagonists of urban spaces⁷³ and notoriously impact the perception of places (Jones, 2015: 111–114)⁷⁴. Third, given that affective relationships are understood from bodies, the constant interaction with beings from the plant world opens new spaces to think non-cognitive modes of thought. These mark modes of vegetal agency and would be practiced from plants towards humans (Dean, 2015: 172).

Now, the proposal of the affective turn not only appeals to trees in general or specific species⁷⁵, but also allows us to understand the stories of particular trees, which interact in a specific time and space. And consequently, special human-tree relationships are generated, in which the tree is recognized as unique and different from others of its species.

Examples of this phenomenon have been documented in Amsterdam regarding the case of a Horse Chestnut – known as the Anne Frank tree⁷⁶; in Stockholm, regarding an oak tree – known as TV-Eken⁷⁷, and in Salzburg. Considering that the Salzburg example is also about a Red Beech and its story also occurred in Austria, I will stop to give more background:

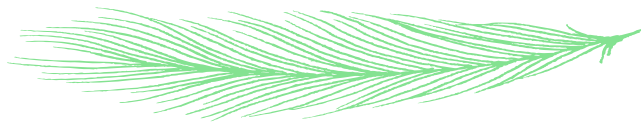
⁷³ Given the large size of their bodies, trees have the power to dominate the landscape despite a local space being densely populated by buildings (Jones, 2015: 114).

⁷⁴ The concept of place is understood as: a complex of material and agential intersections between the human and the non-human that influence each other; and are embedded in temporal cycles. For example, in the case of tree intersections, these cycles can last for centuries and incorporate relational agency that includes landscape, people, soil, air, water, among others (Jones, 2015: 120).

⁷⁵ An example of this corresponds to Patrick's (2005: 202) ethnography, which illustrates how the absence of a tree species changed the perception of an urban forest and became an invitation to activate memories of mourning among some social groups. For more details, see Patrick (2005)

⁷⁶ The case of the Anne Frank tree, Amsterdam, The Netherlands, represents a controversial case in which the defense of a single individual tree (Horse Chestnut/*Aesculus hippocastanum*) involved the mobilization of different human groupings. The tree became famous because it was mentioned in Anne Frank's diary. In the 1990s, the tree began to deteriorate, and local authorities planned to cut it down in 2006. The agency of this particular tree had a non-reflective, affective, and emotional character. It was not just any Horse Chestnut, it was "Anne's Tree", therefore it was linked to the memory of Anne Frank and the Holocaust. The reaction to the removal of "Anne's Tree" transcended local controversy and involved challenges at different scales of governance. Indeed, the iconic implication of this particular tree activated processes of historical memory on a global scale. The mobilization of humans was such that local authorities were able to postpone logging plans. Some time later, a windstorm blew the tree down. The news evoked emotional reactions in countless humans – local and non-local – as the tree was considered a collective monument to the holocaust. To compensate for the loss of the tree, the Anne Frank Foundation created a virtual tree so that people could write their messages of world peace on a virtual leaf. In parallel, the tree was cloned, and its seedlings were distributed in different places around the world (Konijnendijk van den Bosch, 2016: 182).

⁷⁷ The case of TV-Eken, Stockholm, Sweden, refers to a majestic oak tree that stood in front of the Swedish national broadcasting company's building. Following urban road changes, a road was built that initially considered infrastructure to protect it, however, in the 2000s controversy arose regarding the tree's vitality and road safety implications. A decade later the Stockholm City Council decided to remove the oak. Citizens reacted with large-scale



The story of the *Kaiserbuche* is set on Haunsberg, a mountain in the Obertrum area north of Salzburg region and distinguishes between the original Beech and its successor. The historical Beech was planted on October 28, 1779, in commemoration of an unofficial visit by Emperor Joseph II – Kaiser of the Holy Roman Empire – when the Innviertel was annexed to the Habsburg Empire at the end of the war of the Bavarian Succession – also known as *Kartoffelkrieg*. Subsequently, on May 9, 1932, it was declared a natural monument (Land Salzburg, 2005: 1).

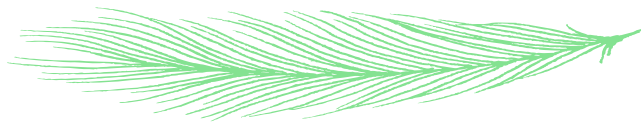
This beech was characterized as a specimen with a wide and powerful crown, which, being on top of a hill, could be seen from almost all points in the political district of Salzburg. Consequently, the tree was famous for its panoramic view and became very popular as a hiking spot (Land Salzburg, 2005: 1–2).

During its 213 years of life, the Beech was recognized for its contribution to the landscape and its relationship with history. However, in the 1990s it began to deteriorate and was subjected to examinations and interventions in order to be preserved⁷⁸. On August 12, 2004, there was a storm that swept away the Beech and its trunk of 5.6 meters in perimeter. Consequently, on August 13, 2004, the district of *Salzburg-Umgebung* had to revoke the declaration of the Imperial Beech as a natural monument, as the destruction of the beech gave no chance for its recovery: two thirds of the trunk had separated from its roots, leaving only a 3-meter-high splinter. The whole of the branches was dismembered by the fall and the trunk was mostly hollow (Land Salzburg, 2005: 3). After its fall, the wood was sold in pieces as a souvenir of the tree (Hell, 2023: 88).

Since this specimen had been weakening since the 1990s, the seeds of this beech had been systematically collected and cultivated. Therefore, on May 1, 2005, the strongest of the cultivated

protests and the creation of “*Redda Ekan-gruppen*” (an association to protect the tree). The association led a large-scale media campaign and hired arboricultural experts to assess whether the tree's vital state was in line with the results presented by the municipality. Since both types of assessments yielded different results, the tree was guarded by human defenders in order to prevent its felling. On November 25, 2011, the protesters were eradicated, and the tree was cut down. The impact of the felling of the tree was such that: 1) municipal officials had to hire bodyguards and panic alarms; 2) the protesters continued to carry out actions and press releases in which the tree was recognized as having an individual and unique iconic character; and 3) a transfer of the tree parts to the Djurgården – the city's most famous park – and the local zoo took place with the aim that the tree could “pass away” and “have a burial” in a majestic way (Konijnendijk van den Bosch, 2016: 182–183).

⁷⁸ Despite interventions and prohibitions on approach, children used to climb its branches (Hell, 2023: 88).



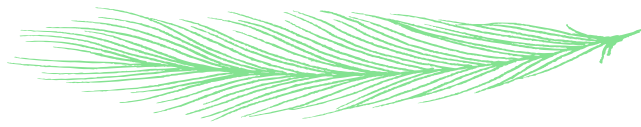
beeches was planted in a ceremony on the Kaiserplatz and named the 'Successor Beech and direct descendant of the original Imperial Red Beech'⁷⁹:

„Aus dieser Ausführung ergibt sich, dass die aus der ehemaligen Kaiserbuche gezogene Buche in Fortführung der historischen Wertvorstellungen und geschichtlich dokumentierter Tradition letztlich auf einem historischen Akt beruht, der staatspolitisch für Österreich von großer Bedeutung war. Dementsprechend kann auch der nachgepflanzte Baum unmittelbar als Nachfahre der berühmt gewordenen Kaiserbuche angesehen werden, deren Schutz von hohem öffentlichen Interesse ist“ (Land Salzburg, 2005: 5).

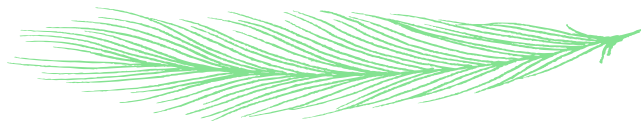
As can be seen in the previous paragraph, the original Beech tree had a relevant significance for the state policy, and due to the idea of continuation of historical values, its relevance was transferred to the successor Beech tree and descendant of the original one. For reasons unknown to the sources reviewed, the successor Beech was the victim of tree vandalism three years after its planting, and the Emperor Josef II July Association would study whether it was still possible for that specimen to develop or whether a new planting should be carried out (Hell, 2023: 88).

Cases such as those of Anne Frank tree, TV-Eken, and *Kaiserbuche*, show that arboreal agency not only operates collectively – forests, parks – but also individually. This agency has the potential to impact human behavior at different scales – personal, collective, regional, national, and international. On this basis, this investigation of the Wertheimsteinpark Blood Beech as another case where the absence of a particular tree affects humans.

⁷⁹ The main arguments were: *„Wie aus der beiliegenden Stellungnahme und dem vorliegenden naturschutzfachlichen Befund ersichtlich, besitzt das Naturgebilde, auch wenn es sich hier um eine Nachpflanzung aus den seinerzeit geborgenen Samen des früheren Naturdenkmales handelt, eine enorme kulturelle Bedeutung, und beruht auf einem historischen Akt, der staatspolitisch für Österreich von großer Bedeutung war. Dementsprechend kann der nachgepflanzte Baum unmittelbar als Nachfahre unserer berühmt gewordenen Kaiserbuche angesehen werden, deren Schutz von hohem öffentlichem Interesse ist. Aus naturschutzfachlicher Sicht wird empfohlen, die Rotbuche zum Naturdenkmal zu erklären, wobei eine Baumscheibe im Radius von 15 m mit einbezogen werden soll, um deren Bestand von vornherein nachhaltig zu sichern. In diesem Bereich haben sämtliche Bodenverwundungen bzw Grabungsarbeiten aber auch Bodenversiegelungen aber auch das Lagern von Gegenständen, parken [sic!] und Abstellen von Fahrzeugen jeglicher Art zu unterbleiben, lediglich Maßnahmen sind zulässig, die zur Förderung und Erhaltung des Baumes führen“* (Land Salzburg, 2005: 3).



The previous pages provided some background information on dimensions that could affect the relationship studied – ecological, political, economic, symbolic, and affective – and the following chapter develops theoretical and methodological elements that situate this case study from a particular perspective.



CHAPTER 3: Theoretical-methodological framework

3.1. Donna Haraway's proposal

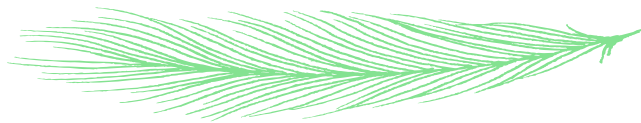
To approach this research, I chose Donna Haraway as a guiding author in the theoretical and methodological discussions, since, during her years of academic career, Haraway has developed several subjects that are relevant to answer the research question. However, this was not the only criterion. I needed an author who was part of the ontological turn⁸⁰, who was a feminist, who addressed multispecies studies, and who had an ethical-political commitment to discussions about environmental justice and care. In addition, I was looking for an author who was coherent with my ecological and political principles, but who had also written enough to provide me with a solid theoretical-methodological framework without restricting spaces for creativity, critical thinking, and deep reflections that did not operate under the dichotomy thinking/feeling.

During this search process, different proposals that are considered as part of the ontological turn were reviewed. The most important were Eduardo Viveiros de Castro – and his proposal of Amerindian Perspectivism (1988, 2012, 2015)⁸¹, Gloria Anzaldúa – and her proposal of decolonizing reality and spiritual activism (Anzaldúa & Keating, 2015)⁸², Eduardo Kohn – and his

⁸⁰ From my point of view, the ontological turn offers tools to think and propose improvements to many problems that currently afflict us as a multi-species society. The ontological turn proposes other ways of looking at what we understand by reality, the way in which we beings understand ourselves and relate to each other. The ontological turn allows building bridges between realities linked to shamanism, academic realities, postcolonial realities, and others: *"The ontological turn has allowed me to find the words to write from situated, decolonial, feminist, affective and critical knowledge, which until now, seemed like butterflies flying around my head. The ontological turn has allowed me to recognize these 'butterflies', not from their individuality, but from their dance. The ontological turn is a dance of butterflies that never ceases. And I, like a dancer, join the dance, learn the steps, exhaust myself, rest, and resume the dance, in each act, with a different style. In the dance of the ontological turn I have learned that there is not one ontological turn, there are many"* (Research diary, October 9, 2023). So, there are several proposals, and of course, none of them is neutral. I think it is important to dwell on this point, because the article Kohn (2015) indicates that there are those who criticize the ontological turn because they consider that it is not sufficiently political. Against this, and in the same line of argument as Kohn (2015), I must say that the ontological turn is political, but it advocates a politics beyond the human. In my opinion, the consideration and recognition of the agency of new actors/actants will always be a political decision.

⁸¹ This proposal refers to the fact that humans, animals, and spirits are part of the same world, which has juxtaposed ontologies. That is to say, each being sees itself and others in a certain way according to its sensory lattices. Under this perspective, one must redefine what is understood by "nature", "culture", and "supernature". On this basis, Viveiros de Castro (1988, 2012, 2015) proposes the multinatural reality.

⁸² From the perspective of Chicana feminism, Anzaldúa deepens the decolonial theory that proposes to transcend the binary thinking of the West. Through the idea of "new mestiza" Anzaldúa advocates for hybrid identities where she also incorporates spiritual aspects linked to political ones (Anzaldúa & Keating, 2015).



ecopolitical proposal of thinking beyond human (2013, 2014, 2015, 2015, 2022)⁸³, Marisol de la Cadena – and her proposal of Indigenous Cosmopolitics (2010)⁸⁴, Bruno Latour – and his proposal of Actor-Network-Theory in the framework of the sociology of associations (1993, 2005, 2013, 2014)⁸⁵, Grahan Harvey – and his proposal of animism (2003, 2005, 2013)⁸⁶, Karen Barad – and her theory of agential realism (2001, 2007, 2012)⁸⁷, Jane Bennett – and her proposal of Vibrant Matter (2010)⁸⁸, Jessica Smartt Gullion – and her proposal of diffractive ethnography within the

⁸³ This proposal refers to the fact that all forms of life can think and learn. Therefore, all forms of life would participate in the processes of signification and use of signs. Although the author focuses on the processes of signification associated with forests, he extends his discussion to the central topics of the ontological turn and dialogues with different proposals of this turn.

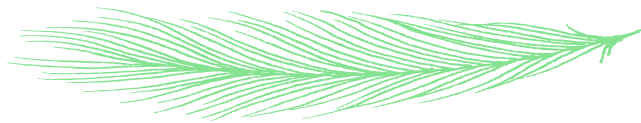
⁸⁴ This proposal refers to the inclusion of non-human actors in the political field. The author develops her proposal through studies and examples in South America.

⁸⁵ The Actor-Network-Theory – henceforth ANT – consists in describing the associations assembled in the relationships between different types of agents/actants. In which the value of each element is relational and the entities co-construct each other. For this, mediating chains of meanings are identified, but these mediators are not predictable, therefore, our role is simply to trace them. From this method, we could only identify agency where there are differences/transformations of something. That is, for agency to be considered as such, we must find a trace or account of this transformation (Latour, 2008. In Flores-Pons et al., 2015: 204). While I greatly value many important ideas in Latour's work, for example, the critique of the Kantian tradition and all his argumentation in his book "We Have Never Been Modern" (1993), his idea of agency, his conceptualization of "actant", and the development of a less anthropocentric worldview. Reading the book chapter "On the Difficulty of Being an ATN" (Latour, 2007) generated in me a mixture of resignation, tension, and later, liberation. I understood something essential: ANT is not a theory; it is an anti-theory. It is not intended to construct or explain anything. Taking on the challenge of analyzing the case of the Blood Beech from the perspective of ANT implied stripping myself of epistemological, theoretical, and practical precepts that I was unwilling to let go of. Likewise, incorporating the variety of non-ecosystemic beings – understood as technological beings, religious beings, literary beings, textual beings, and all those mentioned in "An Inquiry into Modes of Existence: an Anthropology of the Moderns" (Latour, 2013) was a more time-consuming work than was planned for conducting this research.

⁸⁶ Harvey is well known in the field of religious studies for his specialization in animism studies. Through his monographs Harvey documents a world in which animate characteristics are attributed to both beings and objects. This discussion is based on relational epistemologies.

⁸⁷ Karen Barad postulates the inseparability of the materiality of objects and their discursive formulations. To understand the above, the concept of "Intra-action" is key. Intra-action is the set of material and discursive practices that produce agential reality through their performativity. It is not about suppressing the human, but putting the focus on the materializing practices of differentiation where not all actions are merely human, incorporating, for example, material, discursive, social, techno-scientific, natural, and cultural factors. The assemblage of all these factors is called post-humanist performativity (Barad, 2012). The proposal of intra-action based on post-humanist performativity allows us to position ourselves on the basis of a relational ontology where the interweaving of materialities overcomes Newtonian-Cartesian mechanisms. On the other hand, it is worth mentioning that Haraway's proposal incorporates various elements of Barad's proposal, from both joint and independent collaborative discussions (Haraway & Goodeve, 2018a: xlv).

⁸⁸ This proposal refers to a set of ontological precepts through which life – humans, animals, vegetal beings – and matter – objects, storms, stones, metals, among others – are related. For Bennett these kinds of things are not passive entities, but quasi-agents that have their own trajectories and existences: *"I mean the capacity of things — edibles, commodities, storms, metals — not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own"* (Bennett, 2010: P. viii).



Ontological Turn (2018)⁸⁹, Tim Ingold – and his perspective of dwelling (2000, 2004, 2008, 2011, 2021)⁹⁰, Philippe Descola – and his theory of Modes of Being (2010, 2011, 2013, 2014)⁹¹, and of course, Donna Haraway (e.g., 1988, 2004c, 2020g)⁹².

In the year 2023 I spent several months “immersing” myself in the literature of the people mentioned in the previous paragraph⁹³. It was not an easy process for several reasons, to name the most relevant, I will say that reading about different alternatives of how to conceive the real is a process that requires a lot of concentration, will and open-mindedness. Indeed, each process implied a constant questioning of my way of seeing the world. At the same time, most of the texts are written in a foreign language for me, so at times I felt lost in the subtleties of the language.

However, the greatest difficulty was to be able to establish “bridges” between my ethnographic material and the theoretical discussions I was acquiring. At times, there were theoretical proposals that fascinated me, however, being able to link them to what I had written about my fieldwork was unfeasible⁹⁴. In any case, all of the proposals of the ontological turn are invitations to broaden the view, but the differences lie in from where each author is situated.

Within the idea of broadening the view, Haraway relies on the Latourian invitation to incorporate agency, to acknowledge non-human actors, and to accept that “We have never been modern”

⁸⁹ Smartt Guillon's diffractive ethnography is understood as an intra-active process between the researcher, the objects of research, and the apparatus with which the research is carried out. This implies that ideas, things and the researcher are present and active in the process of generating information. The characteristics of this type of ethnographies are relational, situational, and performative in nature, therefore, the data are understood as partial, incomplete and in constant narrative process (Smartt Guillon, 2018). While, this can be seen as a limitation, it also gives the possibility of opening the creative spectrum in the development of post-qualitative methodologies. Complementarily, the notion of diffraction is also understood as a semiotic-material representation. This second view, emerges from Haraway's interpretations of Barad's proposal (Haraway & Goodeve, 2018a: xlii).

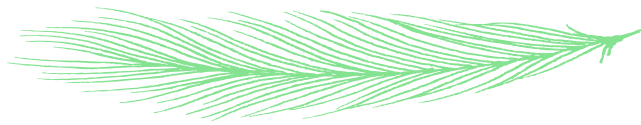
⁹⁰ “I called the perspective of dwelling, a way to overcome the entrenched division between the ‘two worlds’ of nature and society, and to re-embed human being and becoming within the continuum of the lifeworld” (Ingold, 2021: p4).

⁹¹ Through this theory, Descola indicates that human beings have developed different styles of worlding linked to one of 4 types of ontologies – Animism, Naturalism, Totemism, and Analogism. These types of ontologies regulate the relations between humans and non-humans, what we understand by nature, culture and other notions.

⁹² Given the large number of publications reviewed by this author, it is not possible to make a footnote on this subject. Details of these publications can be found in the references of the document.

⁹³ My method of immersing myself in the ideas of an author consisted of making a list of the publications made by this person and selecting to read based, mainly, on two criteria: First, relevance of the publication in relation to my research topic. And second, reiteration of the publication in relation to the other texts I have read.

⁹⁴ Therefore, I decided not to force the link between theory-methodology-ethnographic information and to look for another proposal that would allow a better dialogue between ethnographic information and theoretical-methodological frameworks.



(Haraway, 2004f:1–2)⁹⁵. This way of looking captivates me, it allows me to make room for Haraway and the other non-human actants, it allows me to look at the narratives from a way in which the constructed knowledge includes the actants⁹⁶, but at the same time, it does not force me to strip myself of trajectories of thought that I value and that with Latour would not have been possible.

Donna Haraway places herself from a feminist, socialist, anti-racist perspective that alerts us to the fact that the way of constructing knowledge is also a mechanism for the production of power. In this sense, the author offers an approach between biology and history that allows us to reflect and act without binarily opposing the categories “nature” and “culture”. Indeed, the author speaks of “naturocultures”, and not “nature” and “culture” (Haraway, 2004f: 2-5)

From the above, I must recognize that Donna Haraway has been especially cited for her proposal of situated knowledge⁹⁷, for her cyborg-socialist feminism⁹⁸, and her multi-species works⁹⁹. However, there are other aspects that this author promotes and that were highly relevant for this

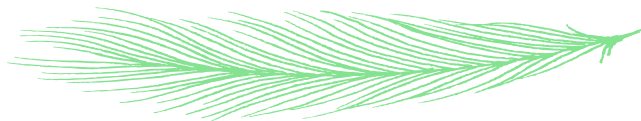
⁹⁵ The motto “We have never been modern” corresponds to a book by Latour (1993), in which he analyzes some controversies in the way of constructing knowledge, and how these are influenced by technical-economic and socio-technical networks. From this Latour develops different critiques and ontological proposals that dialogue with and nourish Donna Haraway's ideas. On the other hand, Haraway's writing strategy, where a book and its sentence are named, responds to a polysemic intention book-phrase, that is to say, a play on words where the semantic unit of the sentence and the name of the book are presented in the same paragraph. This writing strategy is also used extensively by Haraway in “Staying with the Trouble” (2016) as well as “*Seguir con el problema*” (2020) – the Spanish version of the book.

⁹⁶ This form of encounter reminds us that human beings are not alone, nor are we completely masters of our history. Stories are also influenced by biological and more-than-human becoming. So, these stories must be told to generate more habitable worlds for all beings.

⁹⁷ For instance, Streule explores methods of multi-sited ethnography, comparative urbanism, and decolonial thought in Haraway's framework of situated knowledge (2020: 7).

⁹⁸ For example, Billuart (2024) presents her auto-ethnography on the relationship between cis-woman bodies and technology. The discussion in her book is associated in Haraway's framework of the cyborg manifesto.

⁹⁹ Some examples are: Hohti & Tammi (2019) developed a multi-species ethnography regarding the relationship between children and non-human animals. They framed their ethnography according to Haraway's thinking; Timeto (2021) who discussed the meaning of becoming-with in a compost society in the framework of Haraway's thinking and going beyond posthumanism; Molloy Murphy (2018) presents a multi-species ethnography on children from a school in North Portland neighborhood and squirrels. The discussion and analysis is done from Haraway's and Latour's perspectives; Irni (2023) developed a way of *Staying with the Trouble* applied to vegan politics and cats. Other examples are Feltrin (2024), Greenhough (2019), Davis, Moulton, Van Sant & Williams (2019), Lundblad (2022), Stöckelová, Senft & Kolářová (2023), and Kamsteeg, Durrani & Wels (2021). For more details see references.



research work, for example, the importance of the art-science models to produce knowledge (Haraway, 2020i: 112–151)¹⁰⁰.

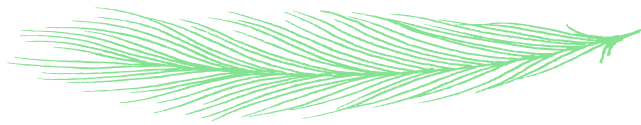
Haraway introduces herself as a situated narrator, she seeks to make known from where she understands, interprets, and proposes. This practice of introduction to writing is present in all her publications. Although some categories have varied over time, or have been made more explicit according to the specific topic of the publication, the following example corresponds to a presentation situated as an author:

“Once upon a time, in the 1970s, the author was a proper, US socialist-feminist, white, female, hominid biologist, who became a historian of science to write about modern Western accounts of monkeys, apes, and women. She belonged to those odd categories, invisible to themselves, which are called ‘unmarked’ and which are dependent upon unequal power for their maintenance” (Haraway, 1998d: 1).

As will be seen in detail below, writing from situated knowledge implies an opportunity to decolonize currents of thought and provide spaces for dialogues between different epistemologies. In the Spanish-speaking case – the academic trajectory in which I was trained in my first years of higher education – Haraway has been received controversially. While Spanish translations of Haraway's texts have been considered risky projects because they come from a work written from and for the Global North, her works have also been considered revolutionary because of the effects of doing science – and thinking – from situated knowledge (Torres¹⁰¹, 2023: 12). So, regardless of the fact that Haraway's publications come from the global north, they have

¹⁰⁰ Some examples of art-science models are presented in the footnotes of “coral reefs”, “Madagascar”, “circumpolar North”, and “Black Mesa” in the section “Sympoietic systems: making-with, thinking-with, and becoming-with” of this document, specifically, where critical areas of struggle within the framework of ecological devastation are discussed.

¹⁰¹ Helen Torres, Argentinian, has translated most of Donna Haraway's books into Spanish. E.g., “Testigo_Modesto@Segundo_Milenio.HombreHembra@_Conoce_Oncorotón”. Feminismo y tecnociencia” (Haraway, 2004k), “Manifiesto Chthuluceno desde Santa Cruz” (Haraway, 2016b), “Seguir con el problema” (Haraway, 2020), and “Mujeres, simios y ciborgs. La reinención de la naturaleza” (Haraway, 2023). Complementary, she has specialized in Donna Haraway's ideas and disseminated them in Spanish-speaking reflection spaces. E.g., Torres (2011), (2019a), (2019b), and (2023). For more details about Torres' contributions, see her website: <https://helenatorres.wordpress.com/> [Available in June 2024].



made sense in the global south and situated thought has found several partial connections with proposals of decolonial thought in the Latin American context¹⁰².

To approach this research the most relevant concepts of Donna Haraway's ideas in her more than 40 years of academic trajectory were selected. This chapter develops an expository thread as follows: the Cyborg figure¹⁰³, Relational Ontology¹⁰⁴, Chthulucene¹⁰⁵, Situated Knowledge¹⁰⁶, and SF¹⁰⁷.

3.1.1. The Cyborg figure

Haraway published the cyborg manifesto in the 1980s. The motive of that manifesto was to redefine the cyborg concept from a feminist perspective, which would make sense of the implosions of contemporary life around the technoscience discussions of that time (Haraway, 2017a: 4). Before Haraway, the figure of the cyborg was associated with two types of imaginaries that contemplated aspects of science fiction and were defined by men (Haraway, 2004d: 321)¹⁰⁸.

¹⁰² In fact, it is worth asking to what extent is the global north/south dichotomy real? For example, do I write from the north or from the south perspective? I live in the north; I grew up in the south. I have a fragmented identity and I have had to learn to think situationally and to embrace the contradictions that this implies. In the face of this, my process of research and reflection has no less or more validity than any other. It is a process that recognizes and situates itself from a particularity that transgresses the south-north dichotomy.

¹⁰³ Including the notion of implosion and integrated circuits.

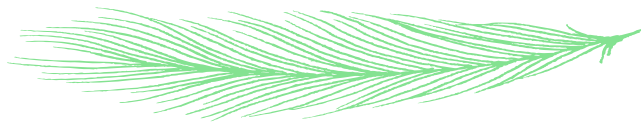
¹⁰⁴ Including the discussion on the apparatus of bodily production, the abolition of binaries, and the proposal of the concept of naturocultures.

¹⁰⁵ Including discussion of the narratives of geological eras, companion species, generating relatives, and sympoietic systems.

¹⁰⁶ Including the feminist critique on Modest Witness, the notion of feminist objectivity, and partial connections.

¹⁰⁷ Including articulations of string figures, speculative fabulation, semiotic-narrative practices, and the “speakers for the dead” applied to multi-species grief.

¹⁰⁸ The two types of imaginaries were: On the one hand, an “extra-terrestrial” military project or related to the “conquest” of space outside the planet earth. On the other hand, for popular and medical culture, the figure of “cyborg” referred to a robotic machine that had a female form (Haraway, 2004d: 321).



In Haraway's redefinition¹⁰⁹, the figure of the cyborg emerges as an irony and a political myth¹¹⁰ to face the technological advances of that time (Haraway, 2004c: 8-9)¹¹¹.

Initially, the author proposes that the cyborg, in a context of concrete cultural practices, is a hybrid, both of machine and organism, and of fiction and reality (Haraway, 2018d: 51)¹¹²: *"A cyborg is a cybernetic organism, a hybrid of a machine and organism, a creature of social reality as well as a creature of fiction. Social reality is lived social relations, our most important political construction, a world-changing fiction"* (Haraway, 2004c: 7).

In the 2010s, the concept is transformed¹¹³. That is, it no longer refers to hybrids between machines and organisms (Torres, 2023: 14-15; Haraway, 2018d: 51), but to a semiotic-material node that reflects the processes we embody¹¹⁴. Subsequently, Haraway returns to establish clarifications to the concept, noting:

¹⁰⁹ The redefinition of the concept corresponds to an empowering action within the framework of a hegemonic techno-scientific project that consisted of deep materializations of highly complex socio-technical relations through animate and inanimate communication systems (Haraway, 2004d: 322).

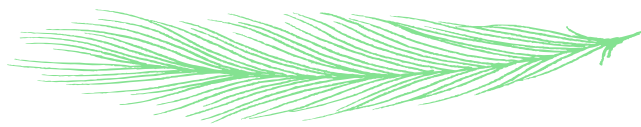
¹¹⁰ The cyborg is a political myth that is linked to feminism and socialism; indeed Donna Haraway situates herself as an American socialist and feminist, but she makes a critique of her own "family of knowledge", pointing out that socialism and feminism have a problem: they fall into essentialist binaries typical of Western epistemology – mind/body, animal/machine, idealism/materialism. *"Feminisms and Marxisms have run aground on Western epistemological imperatives to construct a revolutionary subject from the perspective of hierarchy of oppressions and/or a latent position of moral superiority, innocence, and greater closeness to nature"* (Haraway, 1988: 176). Thus, cyborg is an invitation to disarticulate and rearticulate in another way in order to dispute the field of the imaginable. For this, couplings or assemblages are key, since if we only remain in fragmentation – as happened to Marxism and feminism – we lose the opportunity to build new possibilities. For this construction, fiction is also fundamental (Haraway, 1988: 176).

¹¹¹ It should be noted that this figure is neither technophobic nor technophilic (Haraway, 2004d: 326), it is simply the recognition of assuming that technology was "here to stay" and, like it or not, we had to learn to use it in favor of building a socialist and anti-racist feminism. Thus, Haraway invites us to learn to see technology as an opportunity and not a demon (Haraway, 2004c: 8–17).

¹¹² Regarding the discussion of fiction and reality, it should be noted that, the concept of "fact" refers to the representation of actions performed, a past participle, something that is already consummated. On the other hand, "fiction" has grammatical and verbal differences with "fact". Fiction, refers to action in process, stemming from a present participle, and consequently, it could give us an account of something we do not yet know to be true (Haraway, 2017a: 19). Fiction is a range of possibilities in the construction of narratives.

¹¹³ These transformations are due to the fact that the figure of the cyborg is situated. Then, this figure would not be associated with individuals, but with imploded entities that are part of a global network, but are localized from their semiotic-material figure, and a given historical time (Torres, 2023: 14–15). Consequently, a cyborg does not necessarily have to do with a human-machine fusion (Haraway, 2018d: 51).

¹¹⁴ *"The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; they do not dominate or threaten us. We are responsible for boundaries; we are they."* (Haraway, 2004c: 38). Accordingly, the machine consists of the processes we embody, that is, we are ourselves. The machine imaginary, then, is the irony in



“Los cíborgs no son máquinas en ningún sentido, ni tampoco híbridos de máquina y organismo. De hecho, no son híbridos en absoluto. Son, más bien, entidades implosionadas, densas ‘cosas’ semiótico-materiales, figuras de cuerdas articuladas de relacionalidades ontológicamente heterogéneas¹¹⁵, históricamente situadas, materialmente ricas y viralmente proliferantes de tipos particulares, no en todas partes todo el tiempo, sino aquí, allí y entre, con consecuencias” (Haraway, 2020e: 161).

Thus, the figure of the cyborg is a call to make us responsible for our processes¹¹⁶. This implies assuming that we are no longer innocent creatures, but perverted and experienced creatures (Haraway 1988: 177)¹¹⁷. Consequently, we abandon the category of “modern subject” and constitute ourselves as imploded entities and partial creatures of a post-generic world – without genesis – and without telos (Haraway, 2004c: 10)¹¹⁸.

To constitute ourselves as imploded creatures¹¹⁹ implies the transgression of binary limits (Haraway, 1988: 581), that is, to abolish the opposites that have been used as devices of social

response to the uncritical notion of technological advancement promulgated by the cyborg myth proposed by “high-tech” masculinity and Western science.

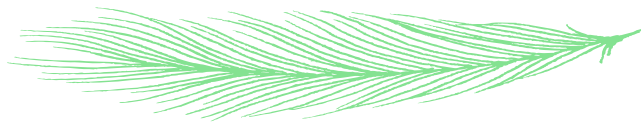
¹¹⁵ The articulation between relationalities refers to the links we can build with the organic and the inorganic: “...a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints” (Haraway, 2004c: 13).

¹¹⁶ Taking responsibility for our processes and our limits does not imply that these are something “given” or “organic”, but that we have learned to recognize ourselves as partial and fluid creatures. Consequently, we are “hybrid” creatures between machine and organism, because we recognize aspects that are given, but these do not represent a unitary whole, but a partiality that merges with other processes that flow from our interactions and intra-actions with other partial creatures. This way of understanding reality, and the political aspects associated with it, is what is known as Cyborg Ontology.

¹¹⁷ “Every story that begins with original innocence and privileges the return to wholeness imagines the drama of life to be individuation, separation, alienation” (Haraway, 1988: 177). But the Cyborg is a creature of a post-generic world: Instead of identities we will speak of affinities. There is no genesis, no telos, no development and no totality. The cyborg does not seek to return to any origin because he recognizes himself as a non-innocent creature, who is already perverted and has experience. From this experience, he exhorts to build a world in which people are not afraid of being related to animals, machines, and are not afraid of the contradictions that may emerge from our partial visions. The invitation is then to abandon essentialisms, to stop creating bonds by “identities” and to create them by “affinities”.

¹¹⁸ Then, Haraway advocates a heteroglossia in which machines, identities, essential categories, relations, histories of space, temporalities are constructed and destroyed, which are then reconstructed from partial visions.

¹¹⁹ It is important to understand the implosion of categories as dynamic processes: “‘Implosion’ summarizes the entirety of what you were exploring in ‘A Manifesto for Cyborgs’, in the sense that a ‘cyborg’ is not a thing but a dynamic process of many elements imploding forcefully into one another, intensifying relationalities and generating new ones” (Haraway & Goodeve, 2018a: xxv–xvi).



control. For example: Nature/Culture, Human/Animal, Organism/Machine, Subject/Object, Semiotic/Material, Self/Other, Mind/Body, Gender/Sex, Thinking/Writing, North/South, Scientific Objectivity/Subjectivity, Life/Death, Physical/Non-physical, Fiction/Reality.

Another methodological contribution provided by the cyborg manifesto refers to the idea of paying attention to stories and narratives. Thus, the identification of myths as a methodological tool becomes substantial to denaturalize identities constructed from phallo-western narratives (Haraway, 2004c: 33)¹²⁰. In order to denaturalize such narratives, we must bear in mind that the cyborg goes beyond the race-class-gender categories¹²¹. It also refers to sociotechnically and historically manipulated creatures. Through the figures of FemaleMan¹²² and OncoMouse¹²³ Haraway exemplifies in depth such a process (Haraway, 2018d: 78)¹²⁴.

Synthesizing, although the proposal of the figure of the cyborg, or “cyborg worlds” is ambiguous. The ambiguity that arises from the literal-figured and material-semiotic relationship is of

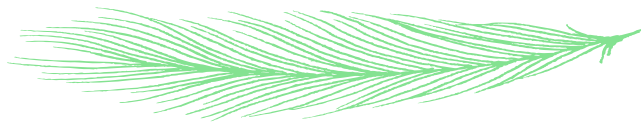
¹²⁰ “Feminist cyborg stories have the task of recording communication and intelligence to subvert command and control” (Haraway, 2004c: 33). Thus, storytelling and allowing for the dialogue of “retold stories” that remix the original myths must be part of the methodological strategy in cyborg research. Indeed, Haraway situates cyborgs, women and apes as borderline creatures that generated destabilizing effects on the grand narratives about evolution, technology and Western biological sciences (Haraway, 1998d: 2).

¹²¹ Post-gender is a proposal that has been nurtured by postcolonial approaches and feminist theories of women of color where feminism is not about “woman” but about “women”, and its accent is on intersectionality. The post-gender concept is understood as: “...a kind of intensified critical understanding of these many threads of production of inequality” (Haraway, 2004d: 329). To understand the phenomena and their relationships, then, we must assume an implacable intersectionality, and thus reject any gender analysis alone. While the three categories Race-Gender-Class have been essential to carry out the post-gender intersectional discussion, Haraway invites us not to remain only in the intersectional analysis of those categories, but to consider the implosions that arise in the process. In this way, multispecies, technical and technological realities can be incorporated into the analysis (Haraway, 2004d: 329).

¹²² The FemaleMan© is an irony on the processes of creation – feminist/scientific – that decontextualize and appropriate texts, products and authors. In other words, Haraway's FemaleMan© proposal is the result of a sense of humor to realize that publishing circuits are not innocent even in U.S. academic feminism – becoming then an opportunity to analyze our positions on the products of technoscience (Haraway, 2018d: 75). “The linguistic and genetic miscegenation of both Russ's Female Man and my FemaleMan© is a tool for provoking a little technical and political intercourse, or criminal conversation, or reproductive commerce, about what counts as nature, for whom, and at what cost. This is the kind of conversation that prepares one for life in the narrative webs of the New World Order, Inc., biopower, the Second Millennium, and the Net” (Haraway, 2018d: 75).

¹²³ The OncoMouse is a genetically modified laboratory research animal. A companion species that links different fields, such as medical, commercial, legal, academic, and political aspects (Haraway, 2018f: 133).

¹²⁴ Both figures, FemaleMan© and OncoMouse TM embody our times within the circuits of production and commodification of semantic-practices associated with scientific knowledge (Haraway, 2018d: 85). Through these figures, Haraway asserts that technoscience consists of binding narratives between humans and non-humans. Such narratives inter- and intra-act in a field of political struggles over what would be considered technoscientific truth within a given scientific community (Haraway, 2018d: 114). For more details, read Haraway, 2018d & 2018f.



particular relevance to account for ontological relations that operate at different levels (Haraway, 2004d: 323). From this strategy, Haraway seeks to show a way of understanding existence – whomever it may be – based on communication systems and processes of implosion of categories. In the author's words:

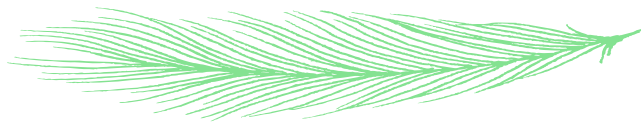
“What interested me was the way of conceiving of us all as communication systems, whether we are animate or inanimate, whether we are animals or plants, human beings or the planet herself, Gaia, or machines of various kinds. This common coin of theorizing existence, this common ontology of everything as communication – control-system was what interested me. It made me very angry and anxious, but interested me in more positive ways, too. Among other things I was attracted by an unconscious and dreamlike quality, and I was interested in affirming not simply the human-machine aspect of cyborgs, but also the degree to which human beings and other organism have a kind of commonality to them in cyborg worlds. It was the joint implosion of human and machine, on the one hand, and human and other organisms, on the other, within a kind of problematic of communication that interested me about the cyborg” (Haraway, 2004d: 322).

As can be seen in the above quote, through cyborg worlds it is possible to inquire into different aspects of communication systems beyond the human¹²⁵. For the purposes of this research, of particular interest is how category implosions affect relations of communication beyond the human in the discussion of ethics, justice, and multispecies care. To address this, the following section discusses the relational character of this ontology.

3.1.2. Relational ontology: Apparatus of bodily production and abolition of binaries

Within the framework of the ontological turn, the notion of “relational ontology” is addressed by several authors. Indeed, Haraway develops her notion of relational ontology in dialogue with Karen Barad's agential realism, Astrid Schrader's intra- and inter-species ontologies (in Haraway, 2008d: 220), Latour's ANT, Butler's theory of performativity, and various post-constructionist and post-feminist proposals. Haraway, like her colleagues already mentioned, advocate for a relational

¹²⁵ In addition, cyborg worlds allowed us to understand women's places within integrated circuits, which is especially relevant for socialist feminists like Haraway (Haraway, 2004d: 322).



ontology¹²⁶, that is, an ontology where there are no prior categories, but co-constitutional processes (Haraway, 2017a: 6)¹²⁷. Another important aspect in the conception of relational ontologies is the notion of non-human agency¹²⁸. Within this notion, social relations are affected by a complex network of entities, be they individuals, groups, rocks, buildings, animals, etc. (Haraway, 2015: 136).

While Haraway constantly relies on the principles proposed by Whitehead – on organic philosophy and processual cosmology¹²⁹ – and on feminist theory (Haraway, 2017a: 7), the author develops in depth her proposal of relational ontology on the basis of interspecific and situated relations¹³⁰ – whose basic concepts will be addressed in the Chthulucene section; semiotic-

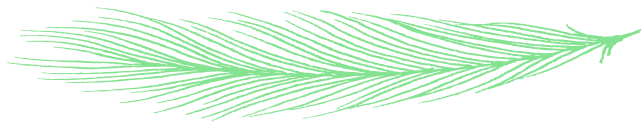
¹²⁶ Other relevant terms in this dialogue refer to “Ontological Choreographies” proposed by Charis Thompson (2005. In Haraway, 2017a: 8) and “Partial Connections” developed by Marilyn Strathern (1991. In Haraway, 2017a: 8). With respect to the former, the emphasis is on the fact that “the dance of beings” includes human and non-human bodies intertwined through relational ontological processes. In relation to the second, the focus is on patterns where those who participate in the process are neither constituted as a whole, nor as a part (Haraway, 2017a: 8).

¹²⁷ Indeed: “*No hay sujetos ni objetos preconstituidos, ni fuentes únicas, ni actores unitarios ni finales definitivos*” (Haraway, 2017a: 6).

¹²⁸ The question of agency refers to who an actor is. This discussion gained momentum initially in the world of technoscience, genomics, and cybernetics since, for process analyses, the “agents” exchanging data, were not the “users” but databases, computers, software, and others (Erickson, 1992. In Haraway, 2018h: 247): “*It does not solve the trouble to say that people are the end users. That turns out to be a contingent, technical, design decision — or a way of representing ongoing flows of information — more than an ontological necessity. People are in the information loop, but their status is a bit iffy in the artificial life world*” (Haraway, 2018h: 247). Consequently, humans would not be at the center of the action but would be part of a network where other agents act in information flows.

¹²⁹ Both proposals are characterized by the rejection of binary dualisms and typological thinking; the rejection of relativisms and universalisms; and the search for processes, historicity, specificity and contingency (Haraway, 2017a: 7).

¹³⁰ For the author it is especially important to establish the distinction between this relational proposal and postmodernist gazes, since the latter are not situated, are denaturalized and trapped in hyper-productionist logics – constant replication of copied images. This is especially dangerous, because it removes agency from all actors but one: the one who generates the image (Haraway, 2004i: 66). Therefore, the challenge is clear: to recognize the agency of the actors and actants – organic and technological – without falling into the trap of reproducing images from a “non-place”.



material nodes (Haraway, 2004: 317)¹³¹; apparatus of bodily production¹³²; and the implosion of binary opposites (Haraway, 2008f: 16–17).

Haraway introduces the concept of “apparatus of bodily production” by mentioning Simone de Beauvoir's ideas regarding “one is not born a woman”¹³³, but applies them to the discussion of bodies. From this, “bodies”¹³⁴ and “organisms” are not born, but constructed (Haraway, 1998g: 208)¹³⁵. In this context, the concept arises from the critique of the reification of gender/sex

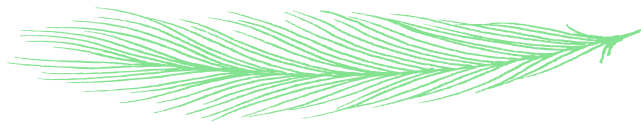
¹³¹ In Haraway, the semiotic-material notion, or “literalization”, refers to the recognition of the union of the material, semiotic, and carnal aspects of a given figure. For example, understanding the semiotic-material dimension in the analysis of a companion species implies that this “companion species” is not only a material body, but that, in addition to it – and in relation to this body – there are semiotic aspects that influence the relation of this figure with the rest. Then, the semiotic-material work performed by a literalized figure – accompanying species – impacts dimensions such as race, species, sex, reproduction, behavior, and genome. Therefore, when we are interpreting any of these dimensions, we must pay attention to the role that the literalized figure is playing in that relationship (Haraway, 2004a: 317).

¹³² This principle of relational ontological analysis is known in the biological world in terms of no creature creating itself. The creation of a creature is always a product of inter- and intra-actions that are at different scales in space/time. This principle has been termed by Gilbert – embryology area – as interspecies epigenesis and refers to the fact that: “*nothing makes itself in the biological world, but rather reciprocal induction within and between always-in-process critters ramifies through space and time on both large and small scales in cascades of inter- and intra-action*” (Haraway, 2008f: 32).

¹³³ Simone de Beauvoir's phrase “*one is not born a woman, but becomes one*” raised new questions for bourgeois functionalist and existentialist “pre-feminist” groups in the post-war period (Haraway, 1998a: 133). However, for Haraway, the reformulations that followed from these questions did not challenge the Western colonialist history that underpins binary categories. Subsequently, second-wave feminists criticized the logic of the “nature-culture” binomial – including its Marxist-humanist dialectical versions – but did not extend their critique to the “sex-gender” binomial at that time, and those categories remained intact, thus still politically dangerous (Haraway, 1998a: 134–135). Indeed, any binary opposite would be suspect, so Haraway's proposal is to think in relational terms.

¹³⁴ “*Bodies as objects of knowledge are material-semiotic generative nodes. Their boundaries materialize in social interaction; ‘objects’ like bodies do not pre-exist as such. Scientific objectivity (the siting/sighting of objects) is not about disengaged discovery, but about mutual and usually unequal structuring, about taking risks*” (Haraway, 1998g: 208).

¹³⁵ The construction of bodies and organisms also implies that their limits are also constructed. For example: the “I”s [egos] and their units that are part of the discourse of the immune system are the product of a conceptual tool named after the apparatus of bodily production. In this example, biological bodies are produced within a set of relationships that include medical practices, research, publications, commercial practices, metaphors, cultural aspects, visualization technologies, among others. The immune system and associated viruses is this, too. These forms of production also have critical spaces of both political and cultural contestation (Haraway, 1998g: 208–209). Biology has created diverse practices of reading the body. In some of them, the body was conceived as a militarized strategic system. This practice is risky in many ways, since disease is conceived as a malfunction in communications that transgresses the limits of the “self”, transforming individuality into a problem of strategic defense. But no body – or object – is sacred in itself, bodies can always be interconnected when the appropriate norm is constructed. We should not think of bodies “in opposition to”. Bodies converge with organic, textual, technical, etc. aspects. Hence, the learning of the figure of the cyborg as a techno-organic, hybrid, textual, metaphorical and theorized embodiment (Haraway, 1998g: 211–212). For more details on how narratives about the biomedical and bio-technical body include diverse interactions between different systems - nervous, immunological, genetic, etc. – and vice versa, read Haraway, 1998g.



categories¹³⁶. For Haraway, gender/sex are not things¹³⁷. Therefore, we speak of apparatuses of bodily production to overcome the reification of these categories and think of them as categories that imply movements and actions (Haraway, 2004d: 329). This implies rethinking categories, but not changing them completely (Haraway, 2008f: 16–17)¹³⁸.

Haraway writes from a feminist perspective that seeks to eliminate binary opposites (Haraway, 1998d: 4). This is because the way of categorizing in binary logic implies the structuring of hierarchies, for example: subject/object, culture/nature, scientific objectivity/subjectivity, among others. This type of structuring has contributed to sustaining social control devices based on a principle of scientific domination¹³⁹. To overcome that principle of domination, imploding binary oppositional distinctions is key (Haraway, 1998b: 7–8; Haraway 2018g: 43).

As mentioned in the previous paragraph, one of the dichotomies to overcome corresponds to nature/culture. For Haraway, nature is understood as a common place – both as a space and as a rhetorical topos¹⁴⁰: *“In this sense, nature is the place to rebuild public culture. Nature is also a tropos, a trope. It is figure, construction, artifact, movement, displacement. Nature cannot pre-exist its construction”* (Haraway, 2004i: 65; 2004b: 126–127). Therefore, from a relational point of

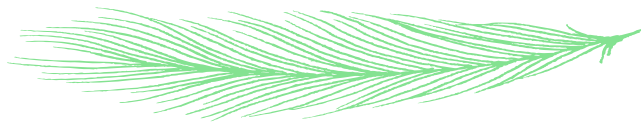
¹³⁶ In the 1970s and 1980s, many debates developed around sex/gender in the U.S. Feminists debated within the sex/gender binary to defend the importance of gender (the cultural) over sex (the biological). With the anti-racist movements, the reduction of the discussion to the mere sex/gender system began to be questioned (Haraway, 1998a: 136–137).

¹³⁷ If we were to find no other way to refer to them, we would be trapped in the matter/form dichotomy (Haraway, 2004d: 329).

¹³⁸ To understand this process Haraway develops an example based on the discussion on posthumanism and post-feminism, in which it is indicated that the categories of “human” and “woman” must be reformulated from an intersectional framework – and not eliminated (Haraway, 2008f: 16–17): *“For one thing, urgent work still remains to be done in reference to those who must inhabit the troubled categories of woman and human, properly pluralized, reformulated, and brought into constitutive intersection with other asymmetrical differences”* (Haraway, 2008f: 17).

¹³⁹ For example, the domination principle of the sciences has led us to misunderstand what we mean by “nature” – as something separate from culture. This has impacted on how the political theory of the body has generated more conditions of social control than of liberation. In parallel, and to quote Marx, the market turns things and people into commodities. Thus, the discourse of “domination” is accompanied by the role of science as a fetish. To address this problem, we can neither completely reject the technical and scientific disciplines, nor accept the essentialization of our bodies and nature (Haraway, 1998b: 8–9).

¹⁴⁰ For example, in the nineteenth and twentieth centuries evolutionary biology occupied an important space in public debate, especially on issues such as the role of humans in nature or relations between nature, politics, and society. This was because there was a debate in Western liberal democracies about whether we should understand the dynamics of human politics as coming from nature (Haraway, 1998h: 83–84).



view, nature would be a space and a cultural construction, in which humans and non-humans participate. Within this construction, many aspects are included (Haraway, 2004i: 65–66).

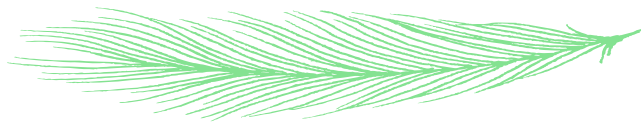
From this, Haraway highlights the need to find a new relationship with nature¹⁴¹, one that is not pigeonholed in relationships of reification, possession, appropriation, and/or nostalgia (Haraway, 2004b: 126)¹⁴².

“So, nature is not just a physical place to which one can go, nor a treasure to fence hidden and so does not need to be unveiled. Nature is not a text to be read in the codes of mathematics and service. Neither mother, nurse, lover, nor slave, nature is not matrix, resource, mirror, nor tool for the reproduction of that odd, ethnocentric, phallogocentric, putatively universal being called Man. Nor for his euphemistically named surrogate, the ‘human’” (Haraway, 2004b: 126).

From the above, it follows that the new relationship we build with nature must consider nature as an actor – and not as an object. The intentionality of thinking nature through Haraway's canons lies in re-incorporating the actors – human, non-human, organic and technological – in the construction of the ethno-specific categories of nature and culture (Haraway, 2004i: 66). *“The actors are not all ‘us’. If the world exists for us as ‘nature’, this designates a kind of relationship, an achievement among many actors, not all of them human, not all of them organic, not all of them technological”* (Haraway, 2004i: 66). This way of conceiving nature moves away from the

¹⁴¹ Modern biology is a system of production and reproduction of what we understand by nature (Haraway, 1998d: 2). The biosocial theories that discuss “Production” refer to humans constructing tools that mediate between ourselves and nature, thus constructing a relationship of human-nature alienation. The alternative proposed by Haraway refers to constructing ways of theorizing our experience in the world. Therefore, feminists must reappropriate the science and theory that we are understanding as “natural” or “nature” from our experience, and not fall into the fetish cult of objectivity of the scientific discourse of alienation and domination (Haraway, 1998i: 22–23).

¹⁴² Haraway argues for the construction of a socialist-feminist theory of the body politic that does not fall into a physiological reductionism and that pays attention to both labor and the constant interaction with what is created (Haraway, 1998b:10): *“What we experience and theorize as nature and as culture are transformed by our work. All we touch and therefore know, including our organic and our social bodies, is made possible for us through labour. Therefore, culture does not dominate nature, not is nature an enemy”* (Haraway, 1998b: 10).



paradigm of rationalism and its stories associated with science and technology, consequently, the nature/culture binomial is considered to have been overcome and we speak of naturoculture¹⁴³.

In synthesis, Haraway's relational ontology exhorts us to overcome binary thinking and to think from patterns of relationality¹⁴⁴. Consequently, relationships are the minimum units of analysis and not separate entities (Haraway, 2008f: 16–17). The above, for the purposes of the discussion on naturoculture, implies that in this construction we must consider the agencies of the actants rather than humans.

3.1.3. Chthulucene

The Chthulucene¹⁴⁵ is the narrative proposal developed by Haraway to temporarily think relational ontology within the framework of the discussion of multi-species eco-justice. Haraway situates the discussion by problematizing narrative constructions of different geological eras: she begins by citing Anna Tsing's proposal in the article “Feral Biologies”. In this, the Holocene is presented as an era in which most of the refugia of this planet had guaranteed processes of constant regeneration – biological and cultural (Tsing 2015b. In Haraway, 2020b: 155).

As a result of the constant elimination of refugia that guarantee the continuity¹⁴⁶ of multispecies living-and-dying, other narratives of geological eras emerged. The two best known are the Anthropocene and the Capitalocene (Haraway, 2020g: 83–84). Both refer to the problem of ecological devastation but differ in understanding what the central cause is. On the one hand, the Anthropocene¹⁴⁷ is posited as an era in which human activities are responsible for the damage to

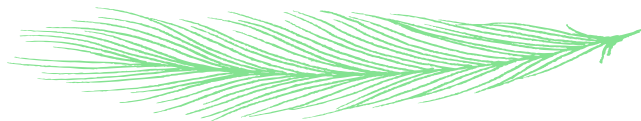
¹⁴³ Following that way of thinking, it is not possible to understand “nature” and “culture” as separate and opposite universal categories (Haraway, 2017a: 8).

¹⁴⁴ Understood as inter- and intra-actions at many scales of space/time.

¹⁴⁵ The word “Chthulucene” is composed of two Greek roots: *khthon* and *kainos*, and their union is used to name a form of spacetime, whose temporality refers to continuity - not to a past, present and future, but to continuity itself. The “*Kainos*” in the deepest sense of the word, refers to continuity, including memories of what can become: the generation of more livable futures. Haraway proposes us to dwell in that space-time in order to learn “Staying with the Trouble” (Haraway, 2020d: 20).

¹⁴⁶ Haraway's concept of continuity refers to: “*nutrir, inventar, descubrir o improvisar de alguna manera formas de vivir y morir bien de manera recíproca en los tejidos de una tierra cuya misma habilidad está amenazada*” (Haraway, 2020a: 204).

¹⁴⁷ The turning point between the Holocene and the Anthropocene refers to the elimination of a large part of the refugia where the continuity of multispecies assemblages can be guaranteed after a significant destruction event, for example, a deforestation event. Thus, the Anthropocene is a time that deals with the destruction of refugia, places



the planet (Haraway, 2020g: 79–81)¹⁴⁸. On the other hand, the Capitalocene¹⁴⁹ refers to a second interpretation of the Anthropocene, in which it would not be the species *Homo sapiens* itself that would be directly responsible for the damage to the planet, but the capitalist system –due to the processes of extraction, consumption, etc. (Werner, 2012. In Haraway, 2020g: 83–84). Haraway shares the “Capitalocene” critique of the “Anthropocene” category since not all humans have been equally perpetrators of devastation. Nevertheless, now that the problem exists, we must all take charge. This, for Haraway (2020g: 83), implies thinking¹⁵⁰.

Now, in the face of the narrative of ecological devastation – regardless of its name: Anthropocene, Capitalocene, Plantationocene, etc. – different responses have been generated. For Haraway, these are insufficient (Haraway, 2020g: 88–89)¹⁵¹: On the one hand, there is the attitude of “technological salvationism” in which it is believed that technology will solve the problem. On the other hand, there is the “Game Over” attitude where it is believed that the changes are irreversible and we would be in the ecological “apocalypse” (Haraway, 2020d: 22–23).

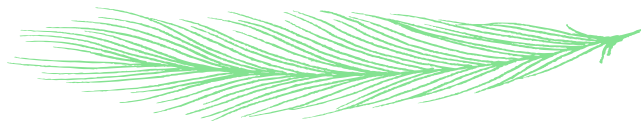
and times affecting both human and non-human creatures. The Anthropocene is an era of discontinuities (Haraway, 2020b: 154–155).

¹⁴⁸ This term was proposed by Michigran Eugene Stormer in the 1980s to refer to the transformative effects of human activities on this planet. Subsequently, in 2000, the term became popular when Paul Crutzen - Nobel laureate in chemistry - joined Stoermer and indicated that the geological impact of the magnitude of human activities required the use of a new geological term (Haraway, 2020g: 79–80).

¹⁴⁹ In 2012 Brad Werner, at a meeting of the American Geophysical Union, pointed out that the economic paradigm of global capitalism threatens ecological stability, since the level of resource depletion is too accelerated for the regeneration of the earth system (Haraway, 2020g: 83). That is, the economic system changed the conditions of the geological system. Therefore, the term Capitalocene would be more appropriate and uncomfortable (Haraway, 2020g: 84).

¹⁵⁰ “Werner no es el primero ni el último investigador y creador de materias de preocupación en argumentar este punto, pero su claridad en un encuentro científico resulta vigorizante. ¡Revuelta! Pensar debemos, debemos pensar. Realmente pensar, no como Eichmann el Irreflexivo. Obviamente, el diablo está en los detalles: ¿Cómo rebelarse? ¿Cómo preocuparse y no solo querer preocuparse?” (Haraway, 2020g: 83).

¹⁵¹ The narratives of the Anthropocene and the Capitalocene quickly fall into a cynical or defeated response to the current times and fail to understand the ontological challenge to be met. The Capitalocene narrative – as well as the Anthropocene – when explained from a fundamentalist Marxism, fall into the traps of the promises of progress and modernity. The invitation is to inherit Marx's contributions, but without falling into determinisms or theologies (Haraway, 2020g: 88). “Las configuraciones de mundos relacionales históricamente situadas se ríen de la división binaria de naturaleza y sociedad y de nuestra esclavitud al Progreso y a su malvada gemela, la Modernización. El Capitaloceno fue creado de manera relacional, no por un ántropos secular similar a dios, ni por una ley de la historia, ni por la máquina en sí, ni por un demonio llamado Modernidad. El Capitaloceno debe ser deshecho de maneral relacional para poder componer algo más vivible a través de patrones e historias SF semiótico-materiales” (Haraway, 2020g: 88–89).



In the face of such responses, Haraway tells us that these narratives need not be the last and urges us *Staying with the problem*¹⁵². Therefore, she proposes another narrative to understand the problem of ecological devastation and to take charge of it: The Chthulucene, the era of commitment to refuge restoration (Haraway, 2020b: 155–156)¹⁵³: *“Una manera de vivir y morir bien como bichos mortales en el Chthuluceno es unir fuerzas para reconstituir refugios, para hacer posible una recuperación y recomposición biológica-cultural-política-tecnológica sólida y parcial, que debe incluir el luto por las pérdidas irreversibles”* (Haraway, 2020b: 156–157).

Similarly, the Chthulucene is an era where stories are not exclusively human¹⁵⁴. From this, Haraway creates the notion of “Terrapolis”¹⁵⁵, the name of our proposal that emphasizes the multi-species character of the “terra” system and that overcomes the human-exceptionalist¹⁵⁶ conception in its configuration¹⁵⁷ (Haraway, 2020f: 33–34).

¹⁵² “*Staying with the problem*” – the name of the book in which Haraway discusses these issues – is an invitation to be present and to recognize ourselves as “chthonic” beings, that is, mortal “bugs” intertwined here, now and in this universe of meanings. Chthonics are not just humans, but beings of the earth, some with tentacles, others with antennae (Haraway, 2020d: 20). It should be noted that the origin of the meaning of the word “Trouble” is associated with a French verb and refers to “to agitate” or “to disturb”. This meaning allows us to refer appropriately to contemporary times, that is, disturbing or troubling times for all creatures living on “Terra”. So, the meaning is also a call to action: Haraway proposes the task of “making kin” in the Chthulucene (Haraway, 2020d: 19).

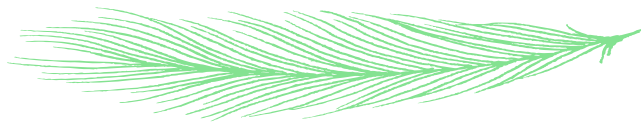
¹⁵³ For Haraway our job is to make the Anthropocene as short as possible. We must live, narrate, and imagine (in) another era. The Chthulucene is an era for restoring refugia through engagement with the other creatures of terra, hence, it is the flowering of multispecies assemblages (Haraway, 2020b: 155–156).

¹⁵⁴ This idea of Haraway's arises from the notion of worldling developed by Beatriz Preciado with respect to “*autre-mondialisation*”, i.e. a multi-species project of global order that is more just and peaceful with the different species (Haraway, 2008f: 3). For Haraway the multi-species interdependence in this worlding game must be known and respected (Haraway, 2008f: 19).

¹⁵⁵ “*Las especies compañeras están involucradas en el antiguo arte de terraformar, son las jugadoras en la ecuación SF que describe Terrápolis. Poniendo fin de una vez a la cosmopolítica globalizadora kantiana y a la cascarrabias configuración de mundos humano-excepcionalista heideggeriana. Terrápolis es una palabra mestiza compuesta por una micorriza de raíces griegas y latinas y sus simbioses. Terrápolis, siempre rica en mundanidad, existe en la red SF de una conexión que es siempre excesiva y en la que la responsabilidad debe ensamblarse de manera improvisada, y no en el intervalo existencialista y desconectado, solitario, creador-del-Hombre teorizado por Heidegger y sus seguidores*” (Haraway, 2020f: 33–34).

¹⁵⁶ This does not mean that human beings do not matter, but that they matter just like the rest of terra's critters. Therefore, we are part of the configuration of the world and of this game of string figures (Haraway, 2020g: 95).

¹⁵⁷ Haraway proposes that we should not think of the Chthulucene as a “post-humanist” emergency, but as a “compost”. Similarly, instead of speaking of humanities, we should speak of humusities. Rusten Hogness proposed both categories to encompass more ways of thinking than the posthumanist option as a Western current (Haraway, 2020g: 60–62).



Multispecies stories are an incentive to construct the Chthulucene as a third narrative, a narrative that operates as a 'bag'¹⁵⁸ and allows us to collect what is essential for the continuity of the cycles of living-and-dying-with. That is, a third narrative that allows *Staying with the Trouble*. Assuming this third narrative, our job is to compost¹⁵⁹ together with the chthonic beings¹⁶⁰. The emphasis on chthonic beings is because they too are capable of reacting to ecological devastation. Therefore, to build the Chthulucene era we must consider order and agency woven into both biotic and abiotic planes (Haraway, 2020g: 94–95).

Indeed, the Chthulucene recognizes the figure of Gaia as an intrusive semiotic-practical force, in the face of which tentacular thinking and practices¹⁶¹ are required for *staying with the trouble*. Within this thinking, the figure of companion species is key.

3.1.3.1. Interspecies relationships generate companion species

The use of the term companion species implies understanding four aspects: “species” refers to a biological type, a philosophical category, a semiotic-material body, and a historically situated context (Haraway 2017a: 14–16). Similarly, to speak of companion species there must be at least two distinct species (Haraway, 2017a: 11)¹⁶².

An iconic example of the above refers to the dog-human interspecific relationship:

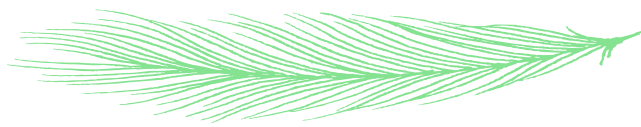
¹⁵⁸ The details of the carrier bag theory of fiction are explained in the SF section of this chapter.

¹⁵⁹ For Haraway, composting implies encountering multi-species wisdom and response-ability. It is to assume that we are all at risk, and that in order to face and *staying with the trouble* we must assume earthly and not heavenly strategies – religious or secular (Haraway, 2020g: 96).

¹⁶⁰ For Haraway the chthonic or tentacular beings are all the beings of Terra: “*son cnidarios, arañas, seres con dedos como los humanos y los mapaches, calamares, medusas, espectacularidades neuronales, entidades fibrosas, seres flagelados, tranzas de miofibrillas, enredos microbianos y fúngicos enmarañados y cubiertos de fieltro, enredaderas exploratorias, raíces inflamadas, seres con zarcillos que se estiran y trepan*” (Haraway, 2020g: 62).

¹⁶¹ To build in the Chthulucene requires many tentacles. This last word comes from the Latin – *tentaculum* – and is attributed with meanings such as: on the one hand “antenna” – noun, on the other hand “to feel” and “to try” – verbs, consequently, actions. Tentacular beings teach us the importance of how to create from cuts, knots, separations and weavings and not on the basis of determinisms (Haraway, 2020g: 61). Thus, the important thing is to situate oneself from a network of connections proper to a relational ontology.

¹⁶² This category is very broad and heterogeneous, since it includes all organic beings that influence our life and vice versa. As an example, Haraway mentions rice, bees, tulips and intestinal flora, among others (Haraway, 2004a: 301-302).



“Los perros¹⁶³ hablan de la inevitable y contradictoria historia de las relaciones — relaciones co-constitutivas en las que ninguno de los compañeros pre-existe al acto de relacionarse, y este acto nunca se da de una vez y para siempre—. La especificidad histórica y la mutabilidad contingente gobiernan en todo momento, en la naturaleza y en la cultura, y en la naturocultura” (Haraway, 2017a: 11).

But beyond the example itself, the important thing is to understand that “Companion species” is a category of analysis that refers to a relationship (Haraway, 2008a: 165)¹⁶⁴ and from there, to focus our attention on agency in interspecific relationships (Haraway, 2004a: 308). What is important in interspecific relations is that they respond to a co-evolutionary becoming. However, we should not understand co-evolution as a merely biological aspect and separate from the cultural or vice versa (Haraway, 2017d: 30)¹⁶⁵. Co-evolution must be understood within the framework of naturocultures (Haraway, 2017e: 63).

Moreover, companion species are the norm and not the exception, that is, beings are prepared to make symbiogenetic relationships with other species (Haraway, 2017d: 32)¹⁶⁶. This type of relationships can be analyzed from different scales and dimensions¹⁶⁷, which would not be

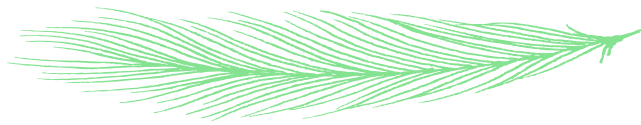
¹⁶³ The example of the human-dog relationship has been extensively analyzed by Donna Haraway, since initially there was a belief that humans unidirectionally domesticated dogs. Understanding the idea of co-evolution implies leaving the paradigm of unidirectional domestication and assuming that both species were transformed from co-habitation (Haraway, 2004a: 304–308). We must understand “co-evolution” beyond mere biological aspects. Although, dogs and humans have an extensive record of bonds and infectious exchanges (Haraway, 2017a: 9), the relationship has historical characteristics, where elements of cruelty, indifference, ignorance, excrement, work, play, joy, intelligence, among others, are entangled. It is important to emphasize that co-habitation does not necessarily imply caressing each other. Companion species generate multiform relationships and in constant construction (Haraway, 2017d: 30).

¹⁶⁴ It must be assumed that beings are co-constituted in a relational process and do not pre-exist before it. The application of abstract categories – such as “nature” or “culture” – is a mistake (Haraway, 2017a: 6).

¹⁶⁵ For example, the visible morphological adaptations of flowers and their pollinators, or the transformations in agro-livestock societies (Haraway, 2017d: 30). Both correspond to inter-specific co-evolutionary processes that respond to naturocultural dimensions.

¹⁶⁶ The fact that there are relations based on symbiogenesis or symbiotic does not mean that all multispecies relations are harmonious. Relationships will depend on the encounter, that is, entities are not preconstituted, but are made by encounters (Haraway, 2008c: 287). This implies that there are identities that would create themselves by problematic encounters. For example: communities function on the basis of food, the point being that there is no way to eat without killing. Eating/killing is also a way of “becoming with” other beings. Now, whether eating/killing, or different food practices are considered good or bad, refers to cultural aspects. Food practices are part of multi-species relations (Haraway, 2008c: 294–295).

¹⁶⁷ For example, in the companion species manifesto, there are chapters where relationships are narrated on a planetary scale and others on a human scale, either with a breed of a particular species – type of dog – or with the



preexisting either. Indeed, Haraway names the proposal of thinking about agencies distributed between local and global strata written by Katie King (2015) and Anna Tsing's (2015a) proposal regarding the creation of relational scales (Haraway, 2017e: 63–64):

“No ve entidades pre-existentes que ya tuvieran la forma y escala de las fronteras, los centros, lo local o lo global, sino en su lugar una ‘creación de escala’ del tipo que crea mundos, en la que reabrir lo que parecía cerrado seguía siendo posible” (Haraway, 2017e: 64).

At the same time, in order to understand this type of agencies, we must approach interspecific analyses in an intersectional manner¹⁶⁸, that is, include the web of relations generated by considering aspects such as technologies, bodies, class, race, gender, nation, among others (Haraway, 2004a: 317).

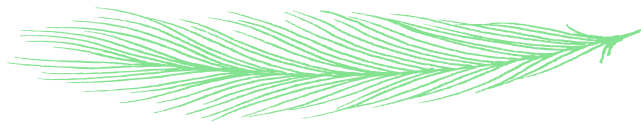
Assuming the notion of co-evolution in companion species relationships, the challenge arises of learning to narrate multi-species narratives, where non-human agencies are incorporated. This implies establishing non-linguistic communications. For these it is especially important to pay attention to bodies as semiotic-material nodes and part of a post-human network (Haraway, 2008f: 16-17)¹⁶⁹. Stories of co-evolution with companion animals are a case in point¹⁷⁰. In some,

individual of a particular species. In all these situations it was observed that both human, animal, and inanimate agencies co-create in a space-time where interspecies attention and respect are essential (Haraway, 2017e: 63).

¹⁶⁸ For this it is key to recognize the historical nodes of a multi-species reality, where unions and disunions are part of an inter- and intra-active becoming (Haraway, 2008f: 35). For example, can other species affect our economic decisions? And similarly, do our economic decisions affect the generation of living capital? The answer is: yes. For more details on this, read: “Value-added dogs and lively capital” (Haraway, 2008e)

¹⁶⁹ To understand this process, Haraway resorts to Barad's Agential Realism, emphasizing that bodies are part of this intra-network and interact agentially, therefore, the status of “organism”, “human”, or any other category does not come deterministically (Haraway, 2008a: 165). Within this perspective, one could not separate between subject and objects, since relations make us parallel subjects and objects (Haraway, 2008f: 16-17).

¹⁷⁰ “Companion animals can be horses, dogs, cats, or a range of other beings willing to make the leap from pet or lab beast to the biosociality of service dogs, family members, or team members in cross-species sports. Generally speaking, one does not eat one's companion animals (not get eaten by them); and one has a hard time shaking colonialist, ethnocentric, ahistorical attitudes to those who do” (Haraway, 2004a: 301). The category “companion animal” as such is relatively new and is constructed from the medical and psychosociological work done by those engaged in veterinary studies and related disciplines. However, it is possible to trace the associated phenomenon of “companion animals” in sources that were written long before the creation of the disciplines that named this category (Haraway, 2004a: 301). There are references to companion animals in different historical and geographical contexts, such as in China and pre-Columbian America, the war in Vietnam, the travels of Alexander the Great, among others. One of the most important points in this category is the capacity to influence our human life. Companion animals are a type of companion species (Haraway, 2017a: 11–12).



such animals are not only situated as family members – associated with the economy of affect, but also as co-workers – associated with the economy of production and survival where the notion of “love” plays second place¹⁷¹.

Thinking within the codes of companion animals requires stepping outside the human construction of Animal Rights. Here interspecies relations are focused on the relationship of co-construction of an ontological choreography that goes beyond anthropocentric moral precepts (Haraway, 2004a: 316–317)¹⁷². This is not to say that there are no ethical issues in interspecific relations; indeed, companion species are a serious feminist issue and correspond to figures of a relational ontology. Their stories matter and have material, meaningful, processual, and constitutive effects (Haraway, 2004a: 307)¹⁷³. Continued concern for the other – whatever species they may be – is an ethical issue. However, the focus would be on constantly asking “who is there”, “who emerges there”, and recognizing that the other cannot be known unless it is in the relationship itself (Haraway, 2017c: 50).

Haraway deepens in this discussion through the study texts of primates, dogs¹⁷⁴, and multispecies families¹⁷⁵ where different answers emerge according to the context of the relationship studied. For example, in relation to human-dog cohabitation on an individual scale Haraway points out:

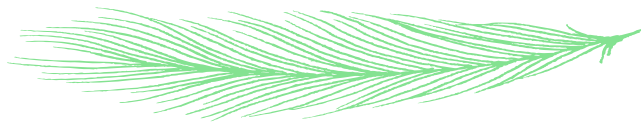
¹⁷¹ Learning to see the other may also be a survival strategy. Sheepdogs, for example, co-evolved alongside human groups developing herding skills (Haraway, 2017c: 51).

¹⁷² “Companion animals” and “companion species” are distinct categories from the idea of animals being treated as “furry babies” (Haraway, 2008a: 165). *“The point is to engage ‘ontological choreography’ in the yearning for more livable and lively relationship across kinds, human and non-human”* (Haraway, 2004a: 316–317).

¹⁷³ Haraway, referencing Barad, indicates that ethics is associated with matter, or the entangled materializations that make us who we are and the possibilities we have (Barad, 2007. In Haraway, 2008c: 285).

¹⁷⁴ *“The ontology of dogs turns out to be quite big, and there are all those names for dogs that are about various kinds of relationalities. Dogs engage many kinds of relationality, but one kind that is practically obligatory is with humans. It is almost part of the definition of a dog to be in relationship with humans.... So dogs have this large array of possible ontologies, that are all about relationship and very heavily about relationship with humans in different historical forms. For people, dogs do a tremendous amount of semiotic work. They work for us not only when they are herding sheep; they also work as figures, and dogs figure back very important kinds of human investments”* (Haraway, 2004d: 330–331). Thus, dogs are linked to different forms of relationality with humans, which present diverse semiotic importance according to their functionality and historical context. Thus, dogs can be breeds, populations, figures, pets, research animals – for ethical and ontological aspects, development of sociability, pedagogy, training, sadism, control, authoritarianism –, workers, sources of rabies, among many others (Haraway, 2004d: 330–331).

¹⁷⁵ The concept of multispecies family (Haraway, 2017e: 95–96) emerges from accounts of dog adoption processes – both pedigree and “satos” [non-pedigree] – as the requirements and required documentation imply the generation



“Mi argumento es simple: conocer y vivir con estos perros significa heredar todas las condiciones de su posibilidad, todo lo que hace que relacionarse con estos seres sea real, todas las aprehensiones que constituyen las especies de compañía. Amar significa ser mundano, estar en conexión con la otredad significativa y con los otros significantes, en muchas escalas, en estratos locales y globales, en redes que se ramifican” (Haraway, 2017e: 81).

From the concept of “significant otherness”, Haraway develops – subsequently – the idea of making kin.

3.1.3.2. Making oddkin

Within the framework of the Chthulucene narrative, Haraway situates the discussion of interspecific relations in a new proposal. This consists of constructing “oddkin”. Generating this type of kinship does not respond to the creation of entities linked by genealogy or biogenetics, but to bonds of care (Haraway, 2020d: 21; Haraway & Goodeve, 2018a: xlvii).

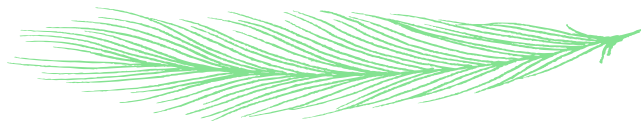
From the above, Haraway proposes that the motto of the Chthulucene is “Make Kin Not Babies” (2020d: 26)¹⁷⁶. This motto refers to creating new forms of bonds that unite us within a multispecies ecojustice¹⁷⁷. Indeed, “make kin” is not restricted to bonding with other humans; Haraway's invitation is to generate multispecies kinships. In this way, kin generation can be extended to a diversity of forms and assemblages. These assemblages would have the capacity to change multispecies becoming¹⁷⁸. For her, making kin is a difficult but necessary task (Haraway, 2020b: 157–159).

of a lifelong bond. *“La cuestión no está en los genes y eso seguramente es un alivio. La cuestión es hacer especies de compañía. Todo está en la familia, para bien y para mal, hasta que la muerte nos separe”* (Haraway, 2017e: 96).

¹⁷⁶ The slogan “Make Kin Not Babies” is constructed from a feminist, anti-racist, anti-colonialist, anti-capitalist, and queer perspective (Haraway, 2020d: 26).

¹⁷⁷ For Haraway, in a deep sense, we are all relatives on Earth. Therefore, the extension and recomposition of “oddkin” is a way of recognizing and caring for whole assemblages and not separate species (Haraway, 2020b: 159). *“Pariente es un tipo de palabra que ensambla”* (Haraway, 2020b: 159).

¹⁷⁸ *“Seguir con el problema requiere generar parentescos raros: nos necesitamos recíprocamente en colaboraciones y combinaciones inesperadas, en pilar de compost caliente. Devenimos-con de manera recíproca o no devenimos en absoluto. Este tipo de semiótica material es siempre situada, en algún lugar y no en ningún lugar, enredada y mundana”* (Haraway, 2020d: 24).



Within this discussion, the notion of multispecies families is once again gaining traction. While this concept was initially focused on how animal adoption procedures advocated building fraternal kinships between companion species¹⁷⁹ (Haraway, 2017e: 95-96), nowadays, the notion focuses on the power of multispecies assemblages based on deep alliances.

This way of making kin allows us to intertwine in multispecies assemblages, and even to ally with cyborgs¹⁸⁰. Haraway makes it clear to us that cyborgs are kin that have been with us since the end of World War II, as historically situated machines, organisms, and humans have “become-with” and played a role through mutually entangling partial connections (Haraway, 2020e: 161–162)¹⁸¹. In other words, when Haraway notes: “cyborgs are also kin”, she means that we must recognize the entanglements between technologies, artifacts, companion species, humans, activisms, art, science, etc. in order to, from there, inhabit the Chthulucene and *staying with the trouble*:

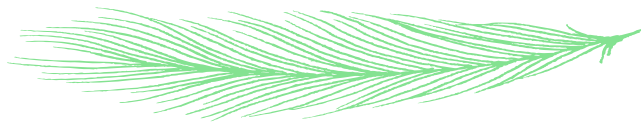
“Tanto los ciborgs como las especies de compañía aportan lo humano y lo no humano, lo orgánico y lo tecnológico, el carbono y la silicona, la libertad y la estructura, la historia y el mito, lo rico y lo pobre, el estado y el sujeto, la diversidad y el reduccionismo, la modernidad y la postmodernidad, y la naturaleza y la cultura de formas inesperadas”
(Haraway, 2017a: 4).

Consequently, to make oddkin is to make alliances based on care. These alliances are of a multispecies character - organic and inorganic - and will allow us to strengthen assemblages to *staying with the trouble*.

¹⁷⁹ The fraternal character of multispecies families refers to the recognition of the place that otherness means in the interspecies relationship, therefore, it does not respond to and is critical of the phenomenon of surrogate motherhood. Humans should not be mothers/fathers to dogs [or cats]. That would be infantilizing them. That is, the adult animal should be included in the family recognizing its animality and adult status, and not be treated as a baby. The phenomenon of the multispecies family is on another plane, linked to the discussion of significant otherness. Thus, it may be necessary to create other pronouns for the kin genders associated with companion species (Haraway, 2017e: 96).

¹⁸⁰ “... las refiguraciones ciborg difícilmente agotan el trabajo trópico requerido para una coreografía ontológica dentro de la tecnociencia. He llegado a ver a los ciborgs como a unos hermanos pequeños dentro de la mucho más grande familia queer de las especies de compañía, en la que las biotecnopolíticas reproductivas son generalmente una sorpresa, a veces incluso una agradable sorpresa” (Haraway, 2017a: 10).

¹⁸¹ “Los ciborgs importan en la configuración terrana de mundos” (Haraway, 2020e: 162).



3.1.3.3. Sympoietic¹⁸² systems: making-with, thinking-with, and becoming-with

Chthulucene requires sympoiesis, which means “making-with” (Haraway, 2020g: 63). Sympoietic systems are characterized by being collectively produced; having self-defined spatial boundaries; and that organization, in terms of information and control, is distributed among the components. Consequently, this type of systems could evolve or transform surprisingly (M. Berth1998. In Haraway 2020i: 102–103).

This notion of sympoiesis differs from autopoietic systems, since the latter are characterized by producing themselves; having defined spatial and temporal limits; and being centrally controlled, operating in a predictable manner and without great possibilities of change (Haraway, 2020i: 102–103). Although the notion of autopoiesis was highly used in biology – and later used in social sciences from the connection between Maturana and Varela, Luhmann and those who continued that stream of systems theory, Haraway points out that most of the systems that we had understood until then as “autopoietic” are, in fact, “sympoietic” (Haraway, 2020g: 64)¹⁸³. Therefore, we must understand Terra as a sympoietic system:

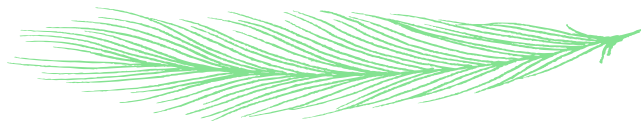
“La tierra del Chtuluceno en curso es simpoiética, no autopoiética...Los sistemas autopoiéticos son interesantísimos: atestiguan la historia de la cibernética y las ciencias de la información. Pero no son buenos modelos para mundos vivos y agonizantes y sus bichos...La poiesis es sinchthónica, simpoiética, siempre asociada, sin ‘unidades’ de inicio y las consiguientes ‘unidades’ interactivas. El Chthuluceno no se cierra sobre sí mismo, no se completa...La tentacularidad es sinchthónica, enrollada con abisales y terribles sujeciones, deshilachados y tejidos, pasando relevos una y otra vez en recursividades generativas que constituyen el vivir y morir” (Haraway, 2020g: 63).

In fact, no organism is self-reproducing, any organism reproduces in interdependence¹⁸⁴ (Haraway, 2018b: 145–146). Haraway develops detailed examples of how sympoietic systems

¹⁸² This term was proposed by M. Beth Dempster in 1998 and refers to systems that occur between different components (Haraway, 2020g: 63).

¹⁸³ For Haraway this term is more appropriate than the notion of autopoiesis, since worlds are configured together and nothing makes itself (Haraway, 2020i: 99).

¹⁸⁴ To develop this argument, Haraway draws on the notion of “unruly edges” proposed by Tsing, which refers to networks of interspecific dependency (Haraway, 2008d: 218; Tsing, 2012; Haraway, 2018b:145–146).



operate in areas such as biology, genome studies¹⁸⁵, evolutionary theory¹⁸⁶, and microbiological development¹⁸⁷. The main emphasis of such examples lies in the importance of relationships to create, change, and continue.

For the purposes of this research, it is worth highlighting one example in particular: holobionts and their creative capacity. Holobionts are understood as sympoietic entities that involve each other in contingent and dynamic ways, therefore, they are mutually generated through their relationships and do not pre-exist to them (Haraway, 2020i: 100):

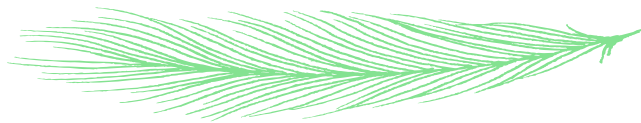
“...utilizo holobionte para nombrar ensamblajes simbióticos, en cualquier escala espacial o temporal, más similares a nudos de diversas relacionabilidades¹⁸⁸ intraactivas en sistemas dinámicos complejos que a entidades de una biología formada por unidades preexistentes delimitadas (genes, células, organismos, etc.) en interacciones que solo pueden ser concebidas como competitivas o cooperativas” (Haraway, 2020i: 101).

¹⁸⁵ For example, it is estimated that only 10% of the entire human genome is exclusively human, the other 90% of the cells contain genomes of bacteria, fungi, protists and others. The combination of all of these is what allows us to be alive, hence, we speak of “becoming with many” (Haraway, 2008f: 3–4).

¹⁸⁶ The history of co-evolution with bacteria accounts for how symbiogenetics operate (Haraway, 2017d: 32). The two most relevant examples in this regard correspond to: 1) The emergence of multicellular animals from relationships between coanoflagellate cultures – *Salpingoeca rosetta* – and *Algpriphagus* bacteria, extensively studied in Nicole King's program at the University of California, and which generated as a result: that being an animal means becoming-with bacteria; and 2) Morphogenetic evolutionary patterns associated with squid-bacteria symbiosis, specifically *Euprymna scolopes* and *Vibrio fischeri* – as bacterial symbiont. In this case, symbiotic collaborations are observed in that the bacteria take refuge in the squid's abdominal pouch. This pouch, thanks to the bacteria, has luminescent properties that cause the squid's prey to mistake the squid for the starry sky. Thus, the squid can hunt and the bacteria have a place to live. These bacteria are an essential part of the squid's evolutionary biology. If squids are not infected by them at the right time – youth – they will have disadvantages in their adult period (Haraway, 2020i: 107–109).

¹⁸⁷ Lynn Margulis—an expert in microbiology studies and a radical evolutionary theorist—focused her work on how: “los nuevos tipos de células, tejidos, órganos y especies evolucionan primordialmente a través de la larga intimidad entre desconocidos” (in Haraway, 2020i: 101). From this she coined the term “symbiogenesis” to the fusion of genomes in symbiosis. This can be observed in bacteria and archaea, which fused with each other. An example of this is the model of multiple associations in the *Mixotricha Paradoxa* where intra- and interactions between bacteria and archaea are observed (Haraway, 2020i: 102–107). This symbiogenetic model allows us to understand the formation of complex sympoietic systems.

¹⁸⁸ It should be noted that the generation of different forms of relationships does not mean that these relationships in and of themselves are mutually beneficial. The network of relationships is highly heterogeneous. The importance is, however, to focus on relationships rather than individuals as a form of analysis (Haraway, 2020i: 101).



Assuming this wisdom, we – humans – would also be “holobionts” in the holobiome called “Terra”¹⁸⁹. From this interpretation, Haraway indicates that we are here to configure worlds from relationships¹⁹⁰: we live and are part of companion species that “terraform”¹⁹¹. Understanding this is fundamental to move towards a multispecies justice (Haraway, 2020i: 151–152; Haraway, 2020b: 153–154).

Within this perspective, ecological devastation is understood as the breakdown of symbiotic relationships, the destruction of the continuity of life, and the urgent need to begin another era. Some examples of critical areas of struggle within the framework of ecological devastation correspond to coral reefs¹⁹², Madagascar¹⁹³, circumpolar North¹⁹⁴, Black Mesa¹⁹⁵, among many others, which are highly developed by Haraway (2020i: 117–123).

Then, inhabiting the narrative of the Chthulucene implies recognizing symposium (making-with) and other tentacular processes, such as “becoming-with” and “thinking-with”¹⁹⁶. Learning to

¹⁸⁹ From this metaphor, Haraway develops her “we are compost” argument. That is, the idea that we and the other terra critters are at risk, and that the way to deal with it consists in the promotion of symposium actions (Haraway, 2020i: 151–152): *“Los bichos están en riesgo unos con otros en cada mezcla y cada vuelta de la pila terrana de compost. Somos compost, no posthumanos; habitamos las humusidades, no las humanidades. Filosófica y materialmente, soy una compostista, no una posthumanista. Los bichos -humanos y no humanos- devienen-con mutuamente, se componen y descomponen unos a otros, en cada escala y registro del tiempo y de las cosas, en marañas simpoiéticas, en configuraciones y desconfiguraciones de mundos terrenales ecológicos, evolutivos y del desarrollo”* (Haraway, 2020i: 151–152).

¹⁹⁰ Natures, cultures, subjects, and objects do not pre-exist their ties. Indeed, *“ninguna especie actúa sola...los ensamblajes de especies orgánicas y de actores abióticos hacen historia, de tipo evolutivo y también de otros tipos”* (Haraway, 2020b: 154).

¹⁹¹ *“Es tarea de todos devenir ontológicamente más creativos y sensibles dentro del arrogante holobioma que es la tierra, llámémosla Gaia o con Mil Nombres Distintos”* (Haraway, 2020i: 152).

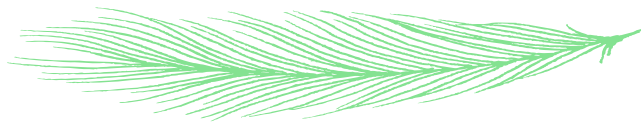
¹⁹² Coral reefs - marine ecosystems containing the highest biodiversity - are under threat. This is because the oceans are becoming increasingly acidic and warmer (Haraway, 2020i: 117–118).

¹⁹³ The Republic of Madagascar, an island with a vast biodiversity, is reaching extremely high levels of extinction and destruction. Fifty percent of the forests – animals, bugs, ecosystems – have disappeared in relation to their presence in the 1950s. The situation is worrisome since 9 out of 10 of the island's species are found exclusively on the island (Haraway, 2020i: 118–119).

¹⁹⁴ The rate of increase in arctic temperatures is twice the global average. Sea ice, glaciers and permafrost are melting, affecting ecosystems and life forms of animals, microbes, plants, and humans (Haraway, 2020i: 119).

¹⁹⁵ Black Mesa is located in Colorado. In 1968, the capitalist and colonizing project of coal mining began, bringing serious damage to the environment – contamination of water with toxic waste, causing the death of countless sheep in the area, which are the center of the subsistence conditions of the native communities in the area. On the other hand, dependence on mining-related jobs keeps the Hopi and Diné nations oppressed. The struggle against mining activity has escalated to different legal and political levels (Haraway, 2020i: 119–123).

¹⁹⁶ The idea of “thinking-with” is proposed by Despret, philosophical etymologist and psychologist, who is constantly quoted by Haraway (Despret, n.d. In Haraway, 2020a: 195–206 & 2020g: 59–98).



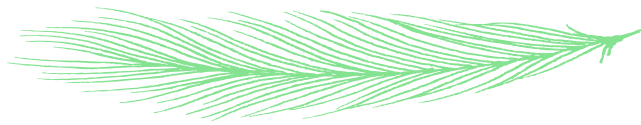
think-with is extremely relevant to inhabit the Chthulucene, otherwise, we repeat models of world configuration that by their negligence are leading us to specicide (Haraway, 2020g: 67–68)¹⁹⁷.

The idea of “thinking-with”, proposed by Vinciane Despret (in Haraway, 2020a: 195–198), refers to thinking together with other beings, whether human or not. For this purpose, the “virtue of kindness” is assumed as an epistemological position¹⁹⁸. This consists in keeping open the possibility of intra-active becomings, divesting ourselves of the pre-established attributions of the beings that suppose the encounter. The virtue of kindness is to integrate the other – and their interests – into the relation of observation. For example, Despret did not document how the ornithologists observed their Arabian turdoids, Despret started from the question “*What are the birds interested in in their relationship with the ornithologists?*” Such inclusive questions make us thinking-with and from relationships. As a result of that exercise, it was obtained that birds and scientists enter into a behavioral dynamic generated by the relationship, therefore, they become jointly (Despret n.d. In Haraway, 2020a: 198). This implies that observation works by addition and not by subtraction. Humans and birds created scripts of behavior and observation. Consequently, humans and birds created new narratives (Haraway, 2020a: 199). Learning to think-with is key to generating the practices and processes that enable “becoming-with”¹⁹⁹. Becoming-with is to

¹⁹⁷ To explain this statement, Haraway follows the same argumentative logic as Hanna Arendt did in explaining the actions of Adolf Eichmann – Nazi war criminal – in “Eichmann in Jerusalem: a report on the banality of evil”(1964), that is, the figure of Eichmann was explained by the ordinary negligence of not problematizing anything; someone who seeks to do his job, but did not process the effects it had on the world. In that case, the result was genocide. For Haraway the “non-thinking” in the face of ecological disaster, makes us, simply “heirs and heiresses of Eichmann”, whose projected result is a “speciescide” (Haraway, 2020g: 67–68).

¹⁹⁸ “*No se trata tanto de una cuestión de modales, sino de una epistemología y una ontología, y de un método de alerta para prácticas fuera de los senderos transitados*” (Haraway, 2020a: 197).

¹⁹⁹ To explain how the notion of “becoming-with” operates, Haraway draws on other research by Despret and Jocelyne Porcher, which asked about the day-to-day interactions between pigs, cows and their breeders. Through farm visits, the researchers obtained that animal breeders emphasize working together with livestock. The success was in understanding what the animals want, as the animals pay attention and know what the farmers want. Thus, accepting the subjectivity of the other, acting the way the other bonds with us is part of becoming-with (Despret, n.d. & Porcher 2011. In Haraway, 2020a: 199–200). In Haraway’s words: “*El resultado es hacer existir animales que nutren a humanos, y humanos que nutren a animales. Vivir y morir es lo que está en juego. ‘Trabajar juntos’ en este tipo de interacción cotidiana entre trabajo, conversación y atención me parece que es el idioma correcto*” (Haraway, 2020a: 200).



situate oneself as a node in the process of giving and receiving in the midst of a network of inter- and intra-actions.

In synthesis, living in the Chthulucene allows us to understand the agency of diverse components and how through these relationships our sympoietic system “Terra” – now dying – could change. To do so, it is necessary to make “oddkin” with the various companion species in order to think and configure worlds that guarantee multispecies living-and-dying. In this process, “thinking-with” and “becoming-with” is part of the strategy. Moreover, this process must be done by thinking in determined scales of time and space (Haraway, 2020i: 152)²⁰⁰. For this, the proposal of situated knowledge is a key tool.

3.1.4. The emergence of situated knowledge in the framework of knowledge production

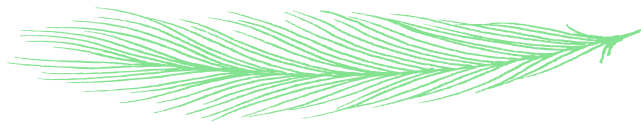
Haraway problematizes the epistemological privilege of scientific knowledge through the visibilization of the figure of the “modest witness”²⁰¹. This consists of the self-representation of a male, European and modern observer, who would have the virtue of being able to clearly explain objects and facts (Haraway, 2018g: 23–31). This witness, supposedly, spoke from a place where he would be “clean” of subjectivities and influences (Haraway, 2018d: 112)²⁰².

For Haraway, science is culture, therefore, the objectivity to which the figure of the modest witness appeals is impossible. This notion of objectivity leads us to confuse an interpretation constructed from the influence of many factors – gender, class, race, culture, interests, etc. – as if it were a “clean truth”. In view of this, Haraway's invitation is to expose the fallacies of the pretension of objectivity in scientific disciplines (Haraway, 1998b: 12).

²⁰⁰ She refers to real and specific places worth fighting for in order to guarantee continuity, such as the aforementioned critical zones (coral reefs, Madagascar, etc.). To this end, Haraway exhorts us to make sympoiesis between art, politics, and science (Haraway, 2020i: 152).

²⁰¹ The figure of the “modest witness” refers to a term enunciated by Steven Shapin and Simon Schaffer (1985. In Haraway, 2018g: 23) and responds to a narrative that “men of science” inhabited a “culture of non-culture” in which mere opinions or embodiments are clean in their processes of observation. For further details on the characteristics of this figure, read Haraway 2018g: 23–31.

²⁰² The Modest Witness operated under the assumption of “God Trick”, which implied a subject/object separation, in which, the object is seen and the subject was awarded the gift of “self-invisibility” to interpret facts (Haraway, 2018g: 23–29; Haraway, 1988: 581)



A second problem in the process of knowledge construction – also linked to the subject/object distinction – refers to the semiotics of representation. The semiotics of representation operates by isolating the “observed object” from its environment. Thus, while *“One set of entities becomes the represented, the other becomes the environment, often threatening, of the represented object. The only actor left is the spokesperson, the one who represents”* (Haraway, 2004i: 88). The problematic consequences of this can be understood in depth from the analysis of the representation of the fetus, genetic fetishism²⁰³, forests in the Amazon²⁰⁴, among others²⁰⁵ (Haraway, 2004i: 87–90).

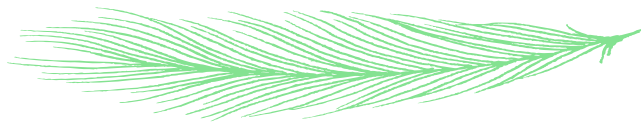
For example, in the case of the fetus, its representation is constructed on the basis of various visualization technologies developed by technoscience²⁰⁶. These project the image of a “fetus floating in space”. Such representation has had strong political and legal repercussions in the discussion on decriminalization and the right to abortion, as the mother and her womb are transformed into “maternal environment” and are stripped of their agency over the fetus

²⁰³ Gene fetishism responds to the myth that the gene is self-reproducing, self-determining, and rejects its dependence on bodily production. Haraway invites us to scrutinize what the culture of non-culture wants to construct and to situate the gene as a cartography that is produced on the basis of intersectionalities. In this sense, the gene should not be understood as something fixed or essential, but as part of a network of relations. Gene fetishism refers to how the narrative about the human genome project, embedded in the logic of the culture of non-culture, “forgot” that the gene is part of a network of integration that also possesses knowledge claims associated with religious-genomic discourses (Haraway, 2018b: 142).

²⁰⁴ In the case of the Amazon, the representation of its forests as a particular object disempowers the Amazonian peoples, since from the viewpoint of the semiotics of representation they would have a conflict of interest to speak on behalf of their local nature. Consequently, the doctrine of representation fails in its way of seeing actors and actants (Haraway, 2004i: 90).

²⁰⁵ Through the question “Who speaks in the name of ___?”, the political semiotics of representation is problematized. The “object” represented could be any entity: subjugated humans, a fetus, a jaguar, nature, and so on. And evidently, in cases “beyond the human” such a question becomes more extreme. For Haraway, the act of representing in the semiotics of representation implies detaching the links between the represented and its environment. Moreover, “the represented” is reduced to the role of “receiver” and is deprived of being co-author of the practice articulated between its interlocutors. Thus, the figure of the “representative ventriloquist” emerges, a scientist who with his discourse of “objectivity” attributes to himself the right to represent, leaving aside the direct nexus of what is represented (Haraway, 2004i: 87–89).

²⁰⁶ In Western culture, images have been considered for hundreds of years as a projection of reality. But the emphasis on what visual technology produces makes invisible the histories of image production. We should not forget that the computer screen is not a mirror of the fetus, it is not its exact copy, it is a projection and another reality, a reality that under specific conventions of visual technology, is constituted as an embodied and imaginary material reality (Haraway, 2018e: 182–185). The construction of such a reality is influenced by rhetorics that can turn the represented object into entities very dissimilar from each other. “Objects of labor” and “subjects of analysis” such as the fetus, depend on the power dynamics, resources, and narratives that are constructed (Casper, 1995b. In Haraway, 2018e: 188–190).



(Haraway, 2004i: 89; Haraway, 2018e: 175–190). Consequently, these kinds of representations are simply masks of dominant interests (Haraway, 1988: 591)²⁰⁷.

Another characteristic of the modest witness's way of doing science refers to the violent and destructive relationship with nature. Nature was understood as something that science had to achieve and reveal, an object with which the modern witness could test its strength (Latour, 1987. In Haraway, 2018g: 33).

Now, Haraway is not against science, what she criticizes is the way in which we are understanding the production of knowledge. Consequently, she urges us to demystify science in order to develop it from a critical thinking²⁰⁸. This thinking must consider that science is also mediated by narratives, technologies, power structures – patriarchy, capitalism, colonialism – and money (Haraway, 1998h: 106–107)²⁰⁹. Therefore, what Haraway seeks is to build a feminist scientific project that offers more adequate explanations of the world (Haraway, 1988: 582)²¹⁰.

To support the above, Haraway develops a series of publications where she works this argument applied to examples of the development of disciplines such as: Primatology²¹¹, technosciences,

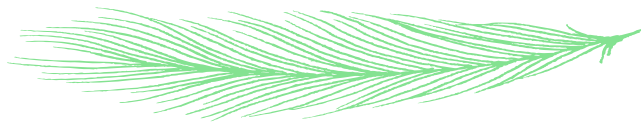
²⁰⁷ To unmask the interests, we must answer the question “*Cui bono?*”, posed by Star. This means “Who benefits from that narrative?” (Star, 1991. In Haraway, 2004a: 316).

²⁰⁸ The demystification of science consists in understanding that its narratives are not innocent, are situated in particular historical conditions, and affect the production and reproduction of our lives. Consequently, scientific narratives are multifaceted – and not mystical – and these have the power to influence the meaning of our lives and our socio-political organization (Haraway, 1998h:106–107).

²⁰⁹ An example of this corresponds to the Ford Foundation's funding to strengthen the male-hunter theory, which contributed to validate gender hierarchies from primate models. For more details, see Haraway, 1998h: 87–92.

²¹⁰ There are different feminist proposals that dialogue with each other and seek that scientific production generates more adequate visions of the world. These are: “*Strong objectivity* (Harding 1992); *agential realism* (Barad 1995a and 1995b); *modest interventions* (Heath forthcoming); *boundary objects, borderlands communities of practice, articulation work, misplaced concretism, and feminist method* (Star 1994); *cyborgs and situated knowledges* (Haraway 1991); *border crossings and narrative strategies* (Traweek 1992); *science as social knowledge* (Longino 1990)” (Haraway, 2018c: 268–269).

²¹¹ For more details on the transformations in primatology, the factors that have influenced it and a reflection on what kind of zoological order this discipline was committed to, see Haraway 2004g: 202–206.



cybernetics, genetic studies²¹², modern biology²¹³, sociobiology²¹⁴, psychobiology²¹⁵, taxidermy²¹⁶, museography, evolutionary theory studies²¹⁷, and biomedicine.

For example, with respect to biomedicine and the discussion of the immune system, Haraway shows how theoretical models and proposed therapies were based on a militarized notion of understanding the body, whose immune system operated as a metaphor for a “battlefield”. This was correlated with contextual factors whose historical moment included several ongoing wars – Cold War, Vietnam War, among others. For Haraway, this way of representing the immune system is horrible. Therefore, she makes a deep analysis of how the biomedical discussion promoted the semantics of “invasion” and “defense”, and how, from a relational ontology, alternative and situated models could be proposed that referred to semantics of self-regulation that did not respond to the semantics of war (Haraway, 1998g: 215–224)²¹⁸.

Through the above example – and the others that Haraway develops in her publications – it can be concluded that the generation of knowledge is neither neutral nor innocent, therefore, the figure of the modest witness must be visualized. Indeed, the rhetoric of the modest witness has generated a social and epistemological order that stripped agency from those who did not comply with the stipulated virtues. Overcoming such rhetoric is not only an epistemological but a sociopolitical challenge. Consequently, we must stop thinking about “representations of the

²¹² For further details of how genome studies and other technosciences address the agencies of the various factors and actors in their development review Haraway, 2004h, especially pp. 266–287.

²¹³ For more details of how female authors in the field of modern biology were making inroads in generating other explanations of origin and nature that were not grounded in a patriarchal voice, see Haraway, 1998c: 72.

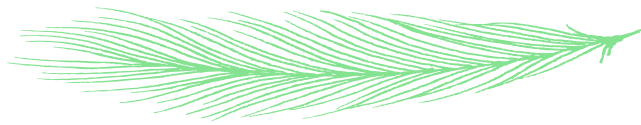
²¹⁴ For further details of how sociobiology has developed in the service of capitalism, patriarchy and other forms of domination review Haraway, 1998f: 43–44; Haraway, 1998i: 42; and Haraway, 1998b: 11.

²¹⁵ For more details on how psychobiology has developed in the service of capitalism, patriarchy, investment management theories, labor control systems, among others, see Haraway, 1998f: 57–68.

²¹⁶ For more details on how taxidermy and museography have been at the service of colonial, patriarchal, and capitalist discourses review the analysis of white masculinity by Haraway, 2015. The entire book consists of accounts, details, and analysis of this type of masculinity from the figures of Theodore Teddy Roosevelt and Carl Akeley.

²¹⁷ For more details on how modern evolutionary theory has been at the service of the construction of a hierarchical order of bodies, how the notion of the “dominant male” could be at the center of social organization, and discourses that would explain male aggressiveness, see Haraway, 1998b: 15–19 and Haraway, 1998i: 22–24.

²¹⁸ For a detailed explanation of how political and biomedical narratives interrelate review Haraway, 1998g, especially pages 211–224.



world” and begin to characterize it from the interlacing between actors and actants that influence our way of producing knowledge (Haraway, 2004i: 89).

Building knowledge from situated knowledge, is an alternative proposal to that of the modest witness, but one that does not disavow science. For that reason, Haraway indicates that this new epistemology allows us to situate ourselves from the figure “Mutated Modest Witness” (Haraway, 2018e: 191; Haraway, 2018c: 269)²¹⁹, that is, a version that perverts the modest witness and is created from both the cyborg and the situated²²⁰.

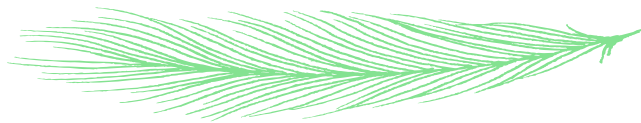
From the questioning of the modest witness's understanding of objectivity, Haraway proposes a feminist, anti-essentialist, and promoting objectivity of partial and non-innocent conversations. Such objectivity is what Haraway terms as “Situated Knowledge” (Haraway, 1988: 581) – and Harding would name as “Strong Objectivity” (In Haraway, 2018g: 36)²²¹. This form of objectivity is constructed from an embodied vision and explicitness of our semiotic technologies, that is, from where and how we produce meanings. Put differently, situated knowledge argues for an “embodied and responsible vision”, where it is recognized that “seeing” is also part of a power relation (Haraway, 1988: 579–581).

Situated knowledge does not refer to a universal subject, but to a partial subject. This partial perspective is precisely more objective because it does not have an eagerness for universalization and makes it explicit that we are seeing from a specific place. From the above, we leave binary systems such as “subject/object” and mind/body, we let ourselves be seen, and we understand that what we see is projected from a particular perspective. Thus, although science is represented

²¹⁹ Feminist studies on science are situated from a place to give an account of the interweavings that affect the generation of knowledge. This is not to say that feminist research is more innocent than any other, but rather, feminist research – in Haraway – would be committed to the principles of freedom, justice, and knowledge led by the figure of the mutated, anti-racist feminist, modest witness (Haraway, 2018e: 191).

²²⁰ Situated knowledge is linked to the cyborg through the idea that we are partial creatures, that we claim our limited location, and that we must take responsibility for both our processes and what we see (Haraway, 1988).

²²¹ Sandra Harding – feminist philosopher of science – presents the concepts of 'strong objectivity' and 'critical reflexivity' to propose a more adequate notion of objectivity in which the social values that affect the research process are included in the discussion (Harding, 1992: 18. In Haraway, 2018g: 36). For her, the construction of reliable criteria in scientific knowledge should respond to democratic logics. For further details, review Haraway, 2028g: 36–39.



as a univocal language, there is a non-consensual heterogeneity of associated discursive elements (Haraway, 1998g: 203–204; Haraway, 1998b: 19)²²².

Synthesizing, Haraway proposes situated knowledge as a response to the figure of the modest witness. This proposed perspective, demands a situated, self-critical character that accounts for historical embodiments²²³. Only from this can knowledge be built on the horizon of freedom and justice (Haraway, 2018e: 199). To move towards the horizon of freedom and justice in the framework of Chthulucene, Haraway proposes SF as a working tool.

3.1.5. SF as a Chthulucene tool: multispecies narratives for flourishing

For Haraway one of the most important tasks of the Chthulucene era is to create multispecies narratives. To achieve this, she proposes SF as a methodological tool (Haraway, 2020g: 62). It could be said that SF is the updated and complexified version of the framework of ideas developed in previous decades associated with the Cyborg proposal, situated knowledge, and the binary system critique. Now, SF is an acronym that brings together several concepts at the same time. These are: Science Fiction, Speculative Fabulation, Speculative Feminism, String Figures, and Scientific Fact (Haraway, 2020d: 21–22; Haraway, 2020c: 229).

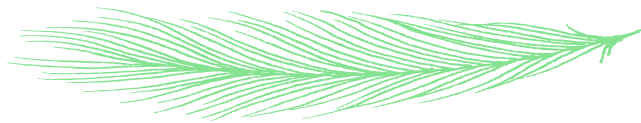
According to the author, we need to activate our creative thinking – speculate, fabulate – for *staying with the trouble* and configure more livable worlds. Therefore, scientific facts would not be enough to configure a SF²²⁴. Scientific facts must be articulated with other tools. The entanglement should assume the logic of a set of string figures called “cat's cradle”²²⁵. In this,

²²² Scientific knowledge is localized and heterogeneous, its condition of “globality” should be related to continuous interlaced activities between the different partialities (Haraway, 2018b: 137).

²²³ Thus, “situated knowledge” does not claim to respond to an abstract philosophical foundation, but has its focus on practical yearnings (Haraway, 2018e: 199).

²²⁴ Haraway's proposal is to build from SF, that is, to narrate stories that weave us into semiotic-material worlds through thinking-with. Therefore, to construct in the Chthulucene is to thread ideas, stories, and practices with different beings (Haraway, 2020g: 62).

²²⁵ The cat's cradle is game where strings are wrapped around a player's fingers and figures are made. Using the metaphor of the cat's cradle game, Haraway raises the importance of the ways of constructing collective knowledge from the figure of the mutated modest witness. In the “cat's cradle” game, while one person can create a great variability of knots, the figures created from the intervention of “several hands” simultaneously, are more complex and unexpected figures (Haraway, 2020f: 31-58). In this “game” it is essential to integrate actors and actants that the conventional modern witness did not consider.



patterns, pauses, and relays are recognized, involving different “hands” or “tentacles” as appropriate – in the framework of Terrapolis (Haraway, 2020f: 35) ²²⁶.

For Haraway, playing cat's cradle implies accepting the method of giving-and-taking. The figures produced from this process allow us to practice “thinking-with”, “generating-with”, and “becoming-with” ²²⁷. However, the various figures that may emerge will vary according to the multi-species narratives involved ²²⁸. That is because string figures are also situated (Haraway, 2020f: 35–38).

To play the “Cat's cradle” properly, Haraway stresses the importance of cultivating response-ability. She does not speak of “responsibility” as guilt, but of “response-ability”. Response-ability is, then, a skill that we develop as a response capacity to be able for *staying with the trouble* and generate continuity in the process of “relay of string figures”. To assume response-ability is to situate ourselves in a non-innocent way that thinks and acts before the challenge of changing the course of ecological devastation (Haraway, 2020g: 64–66) ²²⁹.

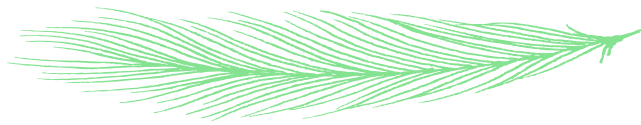
Thus, the creation of multispecies narratives requires a SF where scientific knowledge, response-ability, string-figure logic, and speculative fabulation are interweaved. With respect to speculative fabulation, this practice requires creativity and imagination within a decolonial, anti-racist, multi-

²²⁶ All species are invited to the game of string figures. For Haraway, “staying with the trouble” is always a multispecies affair (Haraway, 2020f: 35). *“Las especies compañeras devienen-con, inexorablemente. La categoría de especies compañeras me ayuda a rechazar el excepcionalismo humano sin invocar el posthumanismo. Las especies compañeras juegan juegos de figuras de cuerdas en los que quien está/quienes están en el mundo y quien sea/quienes sean del mundo se constituye en intraacción e interacción. Los asociados no preceden al anudado; las especies de todos los tipos son consecuentes con los enredos mundanos conformadores de sujetos y objetos”* (Haraway, 2020f: 36).

²²⁷ On this basis Haraway argues that: *“SF, hacer figuras de cuerdas, es simpoiético”* (Haraway, 2020g: 64).

²²⁸ An example of multi-species string figures transforming narratives refers to the Pigeon Blog, a geo-urban project in which humans, pigeons, and machines worked together. As a result: *“Niños reales pasaron de ver a las palomas como ‘ratas con alas’ a verlas como pájaros sociables con vidas y muertes. Los niños dejaron de provocar a los pájaros o de abusar físicamente de ellos para empezar a observarles de manera astuta y defender a estos seres a los que antes no sabían cómo ver o respetar. Los escolares devinieron respon-hábiles. Quizás, debido a que las palomas tienen una larga historia de relaciones afectivas y cognitivas con las personas, ellas también observaban a los niños, y al menos no sufrían abusos. Sé que este relato es una historia, una invitación y un logro, pero el espacio para la recuperación de categorías interespecies despreciadas de habitantes urbanos merece ser ampliado, no clausurado”* (Haraway, 2020f: 52–53). For further details on the interspecific sociability of pigeons and their history of “becoming-with” humans review Haraway, 2020f: 39–53.

²²⁹ *“Esto es lo que llamo cultivar respons-habilidad, en pasión y acción, apego y desapego. Esto es también conocimiento y hacer colectivos, una ecología de las prácticas. Lo hayamos pedido o no, el patrón está en nuestras manos. La respuesta a la confianza de la mano tendida: pensar debemos”* (Haraway, 2020g: 65).



species, anti-capitalist, intersectional feminist framework linked to situated knowledges and territories (Haraway, 2020f: 31).

SF, in addition to recovering complex multi-species stories, proposes to construct sympoietic models in the style of “string figures” where, for example, ecological biology and art-science activism are interweaved. Haraway develops in depth different examples that have emerged as a response to critical situations of ecological devastation (Haraway, 2020d: 25). The most relevant examples correspond to Christine and Margaret Wertheim's crochet coral reef model²³⁰, the speculative fabulation narratives of the Ako Project in Madagascar²³¹, the creation of the videogame “Never Alone (Kisima Ingitchuna)”²³², and the resurgence of Navajo-Churro communities in the face of policies of extermination and genocide (Haraway, 2020i: 124–125)²³³.

All of these examples are understood as activist worlds dedicated to partial healing, engaged and non-innocent as they correspond to resurgence initiatives that appeal to narratives of continuity and resurgence (Haraway, 2020i: 116):

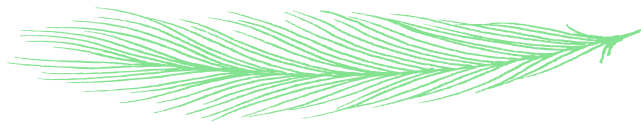
“Cada una de las configuraciones de mundos de arte-ciencia cultiva una responsabilidad sólida para lugares y seres amenazados y poderosos. Cada uno de ellos es un sistema modelo para un pensamiento y una acción simpoiéticos, multiespecies, con múltiples jugadores, y está localizado en un lugar especialmente sensible” (Haraway, 2020i: 116).

²³⁰ Through this example, it is shown how the speculative fabulation elaborated through the practice of crochet allows establishing art-science links to thematize the endangered situation of coral reefs. It is a semiotic-material way of making an alliance recognizing ourselves as multi-species communities and the cultivation of response-ability. For more details on this art-science model, see Haraway, 2020i: 125–129.

²³¹ This art-science model was created to generate alliances between Malagasy communities, lemurs, and other forest creatures. The project was led by women scientists who created stories based on speculative storytelling with the aim of generating instances of biodiversity conservation. For more details of the project and its results see Haraway, 2020i: 130–135.

²³² It corresponds to the first video-game designed in collaboration between the Iñupiaq people – native people of Alaska – and members of the scientific community. This form of speculative storytelling involved integrating practices of configuration of involutionary worlds in digital realities based on sympoietic ontologies between humans, animals, plants, and spirits, who had to work together to ensure the survival of the Arctic (Haraway, 2020i: 137–139).

²³³ This story focuses on a multi-species alliance between Black Mesa communities and churro sheep. The Navajo example shows patterns of response-ability and care between people and animals in the context of a territory that is threatened by Anthropocene/Capitalocene practices (Haraway, 2020i: 140). For further details of the struggle, review Haraway, 2020i: 140–151.



Similarly, we must understand these configurations of art-science activisms as holobiomes, or whose “holoents” are scientists, artists, communities, non-human beings that generate sympoietic, symbiotic, and symanimagenic relationships (Haraway, 2020i: 117). As seen in the examples of these “holobiomes”, the stories are not of heroes, they are stories of communities.

In synthesis, SF is a tool of the Chthulucene that will help us to “flourish”. For Haraway, flourishing refers to the recovery and partial healing of the shelters that guarantee the continuity of living-and-dying in Terrapolis (Haraway, 2020f: 32). Following the model of string figures, we must generate relays and fabulate (Haraway, 2020a: 201). The narratives we construct must teach us about the ability to live among ruins or “arts for living on a damaged planet” – in Anna Tsing’s terms (Tsing, 2017. In Haraway, 2020g:68) ²³⁴. Consequently, the cultivation of response-ability implies the diffusion of seeds and the generation of nutrients, processes, and fermentations so that the earth is available – semiotically and materially – to flourish. In this process, the stories are also seeds and contribute to the work of giving continuity to the cycles of Terrapolis (Haraway, 2020g: 68) ²³⁵.

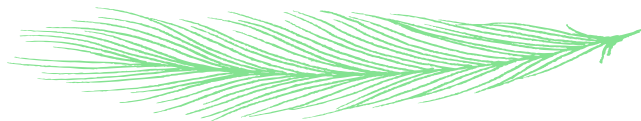
3.1.5.1. Semiotic Narrative Practices for the cultivation of response-ability and partial healing

To propose SF Haraway draws on the “carrier bag theory of fiction”²³⁶ proposed by Le Guin (In Haraway, 2020g: 71–73). This theory postulates that to narrate is to configure worlds. Hence, narratives have to be concave, like a shell or a bag. Narratives must allow something to be taken in – seeds, water – and then shared. In other words, the bag, the curve of a shell, and concave things have the capacity to contain, that is, to give and receive, thus allowing us to “become-with” (Haraway, 2020h: 182–184).

²³⁴ Haraway quotes Anna Tsing’s work regarding what the “arts for living on a damaged planet” means, a planet whose current times are characterized by extinctions, genocides, pauperizations, and multispecies exterminations (Tsing et al, 2017. In Haraway, 2020g: 68).

²³⁵ The invitation to inhabit the stories, to write stories accepting the inherited and emerging aspects. Consequently, giving life to our stories will allow us to broaden our gaze to horizons that transcend ideologies (Haraway, 2004f:1–2; Haraway, 2017a: 16).

²³⁶ “*Importa qué pensamientos piensan pensamientos, importa qué historias cuentan historias*” (Le Guin in Haraway, 2020g: 71). This theory is important because the set of ideas that relate to us influence our narrative process. Thus, through the process of “storytelling” we are “thinking-with” (Haraway, 2020g: 71).



Consequently, generating this type of narrative practices leads us to abandon the “hero”, “battle”, “weapons”, and “resources” narratives since those are linear, patriarchal, and anthropocentric. Applying the carrier bag theory of fiction implies constructing multispecies narratives that involve the recovery of complex histories, that is, histories that include the different beings of the earth and their agencies (Haraway, 2020h: 182–184).

To tell stories and to include in them the companion species is to assume the response-ability of facing the naturocultural multispecies problem in Terrapolis (Haraway, 2020g: 73). These histories must not only consider the different terran critters but must be systemic and intertwined with ecologies and economies (Haraway, 2020g: 85–86)²³⁷. Thus, Haraway refers to them as “Gaia stories” or “geostories”²³⁸.

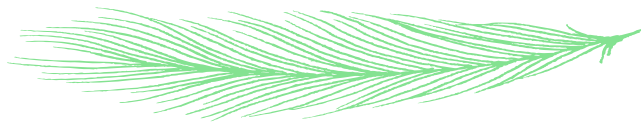
Gaia stories are characterized by questioning the promise of modernity and the division into nature and society. Those who write Gaia stories, – called “Earthbound” by Latour (2013. In Haraway, 2020g:74)²³⁹ – are part of the Chthulucene, they entangle themselves, they create semiotic-material “bags” that are of great use for an ecological recovery (Haraway, 2020g: 74–77). An example of the above refers to Tsing's work (2017). Haraway introduces her work as a sympoietic account, as Tsing follows a “thread” from matsutake mushrooms where the complexity of multi-species relationships can be accounted for²⁴⁰. “*Los matsutake nos explican cómo sobrevivir de manera colaborativa en la perturbación y la contaminación. Necesitamos esta habilidad para vivir entre ruinas*” (Tsing, 2017: 34. En Haraway, 2020g: 69).

²³⁷ In such accounts, companion species must be recognized as part of the process, not just as entities but as members of processes, relationships, and associations that contribute to a larger multispecies alliance (Haraway, 2020h:182–184).

²³⁸ Although the figure of Gaia has been present in the discourses of the Anthropocene – and with a wide diversity of names in different histories of Western thought – Haraway proposes a Gaia situated from the Chthulucene, where Gaia is linked with terran powers and terran critters. For more details review Haraway, 2020g: 90–92.

²³⁹ Latour, in his work “War and Peace in an age of ecological conflicts” (2013. In Haraway, 2020g: 74), points out that we must learn to narrate Gaia stories.

²⁴⁰ “*Siguiendo a las setas matsutake en sus explosivos ensamblajes de personas japonesas, estadounidenses, chinas, coreanas, miao, laosianas y mexicanas; esporas esteras fúngicas; pinos y robles; simbiosis micorrízicas; personas que recolectan y compran setas; transportistas navieros; restauradores y comensales; hombres de negocios; científicos; forestales; secuenciadores de ADN y sus especies cambiantes, y mucho más, Tsing practica la simpoiesis en tiempos inquietantes*” (Haraway, 2020g: 68–69).



Haraway (2020g) and Tsing (2015a) share the same diagnosis: since we cannot rely on the failed promise of “progress”, we must response-ability engage in the call for continuity (Haraway, 2020g: 69–70). Now, Haraway and her co-thinkers know that the call for continuity can only imply a partial healing. This means that there are also ecosystems, corridors, refuges, sympoietic systems – and their associated species – that cannot be healed. It is, therefore, essential to understand what extinction means.

Extinction, according to Van Dooren²⁴¹, is not a particular event, but a prolonged time limit where different species see the advent of “double death”²⁴². Extinction is the end of continuity, and the species involved witness how sympoietic assemblages are being torn apart (Van Dooren, 2014. In Haraway, 2020g: 70). *“¿Qué ocurre cuando uno de los asociados involucrado de manera crítica en la vida de otro desaparece de la tierra? ¿Qué pasa cuando se desintegran los holobiontes? ¿Qué pasa cuando holobionomas enteros se desmigajan entre las ruinas de simbiosis rotos?”* (Haraway, 2020i: 114).

A multispecies example of this process refers to the Bee Orchid. This flower took the shape of the genitalia of a particular type of female bee. This bee became extinct, and the flower continues to safeguard the memory of the bee (Haraway, 2020i: 112–114)²⁴³. From this type of examples – also documented in works by Van Dooren²⁴⁴ and Despret – Haraway shows how non-human species mourn the loss of their significant beings, be they symbionts, landscapes, or ecosystems (van Dooren, 2014; Despret n.d. In Haraway, 2020g: 71).

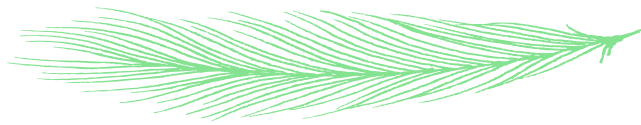
Grieving involves appreciating what loss means, and how the absence of something/someone creates changes in the world and its relationships. Grief prompts us to change and renew the

²⁴¹ Thom van Dooren is a multi-species ethnographer who in his work “Flight Ways” develops themes of partial recovery, extinction, extermination and multi-species grief (van Dooren, 2014. In Haraway, 2020i: 70).

²⁴² When Haraway speaks of double death, she refers not only to the death of an entity, but to a permanent interruption of the whole cycle of life and death. Double death is a way of understanding extinction by emphasizing the relational. Therefore, it is understood as the “end of continuity”. This term was proposed by Debora Birde Rose and is constantly used by Haraway (Rose, 2004; 2006. In Haraway, 2020i).

²⁴³ While this phenomenon was considered from an orthodox neo-Darwinian logic as a form of exploitation by the flower to the insect, from the perspective of sympoietic systems the phenomenon is explained because plants and insects are reciprocally entangled (Haraway, 2020i: 112–113).

²⁴⁴ For example, Van Dooren argues that corvids also mourn, they mourn the loss of loved ones, places and ways of life. Thus, mourning is not an exclusively human practice (Van Dooren, 2014. In Haraway, 2020i: 71).



ways in which we relate to each other²⁴⁵. Mourning makes us aware of our interdependencies, and therefore, evokes the active presence of the dead (Haraway, 2020g: 71). The situation of absences, effective, or threatened, are an aspect of response-ability. Narrative work as a way of responding to these absences is a practical aspect that allows us to configure possible presents and futures. The work of absences is also speculative fabulation (Haraway, 2020a: 204–205).

Despret, who also studied mourning practices, indicates that these involve a lived co-presence with the absent. While this process may encompass different types of materiality and temporality, it always consists of an activated narrative (Despret, n.d. In Haraway, 2020a: 204).

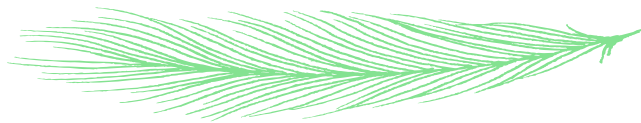
Haraway talks about the “Speakers for the Dead” as instances where we remember losses, bring the dead into the present, and generate ongoing representations of memory. *“Re-memorar, conmemorar, es repetir, revivir, retomar, recuperar de manera activa”* (Haraway, 2020f: 53). Writing multispecies narratives in the Chthulucene framework includes writing multispecies grief narratives. This will not make the loss undone but makes it possible to leave open spaces of the memory of this loss (Haraway, 2020i: 114–115)²⁴⁶. The Speakers for the Dead are another way of staying with the trouble. *“Los palabreros de los muertos enseñan prácticas de recuerdo y duelo que incorporan bichos humanos y no humanos a la continua tarea de cortar las cadenas de la Doble Muerte”* (Haraway, 2020c: 246–247).

In synthesis, the Speakers for the Dead are also part of the task of partial healing. Telling multispecies stories where the lives and deaths of beings are narrated, or threats of extinction, or mourning evoked by the double death, are a semiotic-narrative practice that contributes to the struggle for the continuity of ecosystems. These Gaia stories require SF as a methodology.

3.1.5.2. The Camille Stories as an example of SF

²⁴⁵ This process of living through grief is part of the cultivation of response-ability (Haraway, 2020g: 70).

²⁴⁶ An example of a multispecies Speakers for the Dead is that of the Bee Orchid. In this one the flower is not the extinct bee, the flower is a memory and interpretation that the plant made for the male bee (Haraway, 2020i: 114): *“...la flor recoge la presencia de la abeja de manera oblicua, en deseo y mortalidad. La forma de la flor es una idea del aspecto que tenía la abeja hembra para la abeja macho... tal y como lo interpretó la planta... la única memoria de la abeja es una pintura hecha por una flor que agoniza. Habiendo sido abrazada en el pasado por abejas vivas zumbando a su alrededor, la flor es una palabrera de los muertos”* (Haraway, 2020i: 114–115).



The iconic example of the power of SF in its dimension of speculative fabulation refers to “The Camille Stories”. This story deals with socialities and materialities in multi-species living-dying and is presented as the intergenerational story of “The Communities of Compost”. These communities, develop strategies to make symbiosis and *staying with the trouble* (Haraway, 2020d: 29). The story was constructed collectively between Haraway, Fabrizio Terranova – filmmaker –, and Vinciane Despret – philosophical ethologist and psychologist. The version published by Haraway corresponds to the memory of the version that this team collectively gestated in the framework of a literary workshop held in 2013 where they were asked to fabulate Camille – a human baby – and accompany her through five generations (Haraway, 2020c: 207–208) ²⁴⁷.

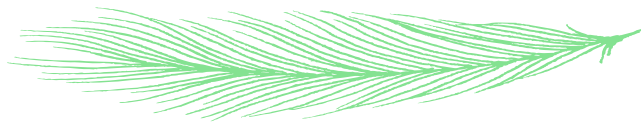
“Las historias de Camille son invitaciones a participar en un tipo de género de ficción comprometido con el fortalecimiento de formas para proponer futuros cercanos, futuros posibles y presentes inverosímiles pero reales [248]... Las Niñas y Niños del Compost quieren que las ‘Historias de Camille’ sean un proyecto piloto, un modelo, un objeto de juego y trabajo para componer proyectos colectivos, no solo en la imaginación, sino también en la escritura real de relatos. Sobre y bajo la tierra” (Haraway, 2020c: 209).

From this work, one can appreciate how all the theoretical-methodological tools²⁴⁹ proposed by Haraway are woven into a SF story. The details of these stories matter because they link us to real

²⁴⁷ The accompanying work of these generations was focused on imagining struggles for multispecies flourishing (Haraway, 2020c: 208).

²⁴⁸ For example, in Camille's fifth generation, Haraway and her colleagues fabricated the role of speakers for the dead vis-à-vis the extinct species in that period. Within the story, in the life span of the fifth Camille, about 50% of the non-human alterities – plants, animals, fungi – were extinct. It was necessary to propose new experimental sympoiesis to face the coming times and to continue with the problem. Camille 5, who for 5 generations had dedicated her life to the care of the symbiotic relationships of the monarch butterfly, also had to rethink her tasks. The monarch butterfly was extinct. The loss of the monarch butterflies was deeply mourned by the Mazahua communities, as their extinction had a tremendous impact on how these communities related to their dead relatives. Camille 5, as a speaker for the dead monarch butterfly, dedicated her life to generate – in conjunction with the Mazahua communities – active memory so that other sympoietic relationships would not succumb to the double death (Haraway, 2020c: 250–251). The above fabulation gives an account of possible futures in the face of which strategies must be devised to confront the speculated problems.

²⁴⁹ Constructing reality through the concepts of situated knowledge, companion species, cyborg, sympoietic systems, symbiosis, struggle for continuity, narrative bag theory, relay for uncertain futures, Speakers for the Dead, becoming-with, response-ability, making oddkin, among others; is understood by Haraway as an ontological revolution (Haraway, 2020c: 244).



beings and real responsibilities. This exercise enhances collective thinking in terms of understanding multi-species interrelationships at different scales, times and matters. By being aware of this, we can work together for flourishing (Haraway, 2020e: 179).

In short, SF stories like *The Camille Stories* exemplify how we construct reality²⁵⁰ from the stories we tell and how they articulate to other stories, knowledge and longings (Haraway, 2020i: 151). Therefore, it is an invitation to take up the baton and make Gaia stories. One of them refers to the story of the Blood Beech in the Wertheimsteinpark.

3.2. Methodological decisions

In order to account for the research process carried out, this section is subdivided into two parts: First, the process of ethnographic information production carried out during the fieldwork is explained. Subsequently, the process of writing and analyzing the ethnographic and bibliographic information is clarified.

3.2.1. Ethnographic information production process

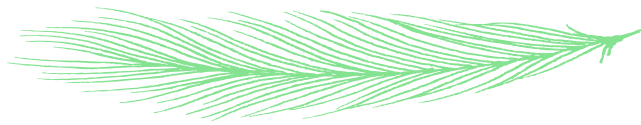
This research began with fieldwork conducted between March and May 2021 in the Wertheimsteinpark. The process was inspired by the model of participatory action research proposed by Genat (2009)²⁵¹, especially in the collaborative dimension assumed by the participants; the incorporation of methodological elements based on diffractive ethnographies proposed by Smartt Gullion (2018)²⁵², mainly in its relational, situational, and performative character of more than human aspects; and the proposal of situated knowledge by Donna Haraway (1988)²⁵³.

²⁵⁰ That process has been named from diverse terms – cosmological activities, configuration of art-science worlds, situated knowledge, materialism, sympoiesis, etc. – but beyond the specific term, we must keep in mind that we become-with (Haraway, 2020i: 151).

²⁵¹ In this approach, knowledge production is collaborative between the researcher and other agents involved in the research context (Genat, 2009). This implied that the participants were able to influence some methodological decisions and to collaborate actively according to their wishes.

²⁵² Smartt Guillon's (2018) proposal of diffractive ethnography has already been explained, together with the authors of the ontological turn, in the first part of this chapter.

²⁵³ The proposal of situated knowledge was extensively explained in the section “The emergence of situated knowledge in the framework of knowledge production” of this chapter.



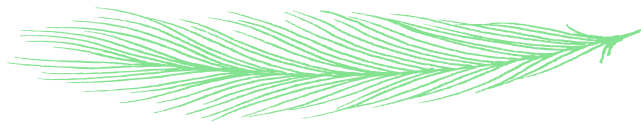
In the case of the situated knowledge proposal, the ideas that framed the methodological decisions refer to the fact that I, in my role as researcher, positioned myself as a “mutated modest witness” who recognizes and values how categories, thoughts, experiences, and emotions influence the way of observing. This research had no pretense of presenting a “clean” narrative based on subject/object separation or the semiotics of representation. On the contrary, this research is neither neutral nor innocent. The research process was intended to acknowledge and vindicate the narratives regarding the Blood Beech, understood as partial visions. Indeed, my role as a researcher consisted in being one more semiotic-material node in the web of a multi-species network generated in the Wertheimsteinpark.

Another relevant aspect applied – in the framework of Donna Haraway's thinking – is the embodied character of the vision and interaction in the fieldwork, that is, I was not invisible, but always presented myself from my position as an anthropology student, Chilean, and a person with high sensitivity to multispecies issues. This form of embodiment generated sympathy and connection with the participants of the study.

Likewise, I paid special attention to the visual and corporal aspects in the construction of the stories²⁵⁴. Regarding the former, I documented by means of photographs and videos the transformations of the park, its beings, and interactions between visitors and the absence of the Blood Beech²⁵⁵. Part of the visual material was produced by me, and the other was voluntarily donated by the participants of the study. In relation to the bodily aspects, special attention was paid to the reaction and interaction of the human bodies, the territory, and the non-human bodies. Consequently, participants reflected – through their narratives – on the reaction of their

²⁵⁴ This dimension of the proposal also considered elements of the body-territory methodology, which is framed within a critical decolonial and feminist Latin American perspective. This proposal points out that visibility, participation and the use of hands are valid ways to generate knowledge. This method emphasizes the connection between our embodiment and the earth. The Body-Territory conceptualization is defined as an ontological relationship where the body is inseparable from the territory (Zaragocin & Caretta, 2021:3–5). The dialogue with this approach implied innovating in the ways of observing and perceiving space through the use of the different senses of the body (observations at ground level, aerial observations, observations blocking the sense of sight, visits to the park at times of different lighting and temperature, among others).

²⁵⁵ By interaction with the absence, I refer to the actions and reactions that the participants performed in the space where the Blood Beech used to be.



bodies to the absence of the Blood Beech – crying, running to hug the trunk, not wanting to visit the park again, feeling disoriented, etc.

Finally, within the proposal of situated knowledge, Haraway emphasizes the importance of partial conversations. For the purposes of this research, partial conversations took the form of ethnographic conversations between the researcher and park visitors. These took place in Wertheimsteinpark, specifically in a delimited observation area: the zone where the Blood Beech used to be.

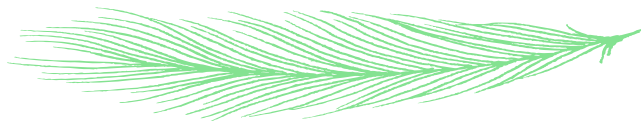
Since the observation area was an open space, conversations were initiated spontaneously by asking park visitors if they remembered the tree²⁵⁶. Similarly, it was explained to visitors that this study is framed by ethical principles of consent, anonymity-identification, and participatory voluntariness. This means that once visitors understood the context of the study, they could decide if and how they wanted to participate.

Based on the above, different participation profiles were generated. First, there were participants who assumed a passive participation, i.e., they participated in the ethnographic conversation and their reactions to the absence of the Blood Beech were photographed. Second, there was a profile of sporadically active participants, i.e., in addition to the activities carried out by the previous group, these participants gave advice on how to advance the research process or offered to share relevant material (photos, e-mails, literature, etc.). Most of these first two types of informants are anonymous. Thirdly, there was a group of visitors who expressed a special interest in the progress of the research. Then, in addition to collaborating in the same way as both previous groups did, this type of participant takes up the ethnographic conversations to reflect on the findings and opinions about the other visitors to the park²⁵⁷.

At the same time, in the process of negotiating participation, informants were able to decide whether they wanted to be identifiable and recognized. While most participants opted for

²⁵⁶ These types of conversations were initiated with humans who came to interact with the remains left at the site – trunk, roots, crater, as appropriate at the time of the investigation.

²⁵⁷ The conversations with this third participation profile were especially important because it was possible to jointly readapt methodological strategies. Consequently, we sought to apply flexible methodological strategies that would be appropriate to the different spatio-temporal contexts of the study.



anonymity²⁵⁸, other participants wanted to be identifiable²⁵⁹, and others wanted to be recognized²⁶⁰. Therefore, those names and/or roles are real and are in the acknowledgements. Regardless of the type of participation chosen by the visitors, it should be noted that they valued the possibility of being part of this research because they saw in it an opportunity to express themselves regarding the situation of the Blood Beech.

The final product of the fieldwork consisted of an ethnographic diary and folders containing the visual and audiovisual material generated.

3.2.2. Writing process and analysis of ethnographic and bibliographic information

In addition to the writing of the ethnographic diary, this research developed a research diary in which I gradually systematized the literature reviewed, the methodological decisions, the limitations and difficulties, the work of relating categories, and the reflections of the whole process. I must emphasize that this second research diary helped me to understand Donna Haraway's knowledge in depth. From it, I was able to select which themes worked on were essential to be included in this writing. The research diary was written with an accuracy in that it linked each idea to each page in each article read. It was hard work, but if I had not done it, it would not have been possible to process the amount of readings and ideas that have nurtured this research process.

To analyze the information produced in both diaries – ethnographic and research – the Situational Analysis technique proposed by Clarke, Friese & Washburn (2015: 100) was chosen. Situational maps consist of visual tools that present the main elements of the phenomenon under study. These elements can be human, non-human²⁶¹, discursive, etc. The important thing is that these maps account for the relationships of the elements and portray situations, worlds, and social arenas at different levels²⁶².

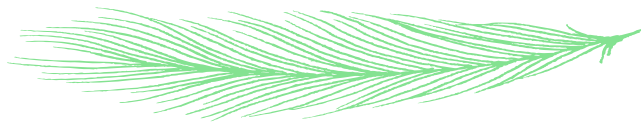
²⁵⁸ Mainly those belonging to the passive participation group.

²⁵⁹ That no special procedure was performed to “anonymize” them and they wanted their faces to appear in the photographs.

²⁶⁰ This third group wanted their role or name to appear as a character in the stories.

²⁶¹ Animals, technologies, flora, media, material culture, among others.

²⁶² In the words of the authors: “*The initial maps done in SA – Situational maps – lay out the major human, nonhuman, discursive, historical, symbolic, cultural, political, and other elements in the research situation of concern and provoke*



This strategy of analysis was chosen for two main reasons: first, because this proposal contemplates the explicit incorporation of non-human elements as a fundamental dimension of the analysis. And second, because it is compatible with the whole theoretical discussion of the ontological turn and Haraway's thinking²⁶³. As a result of both research diaries, three situational maps were elaborated:

The first focused exclusively on the relationships and elements emerging from the fieldwork. From this map, the presentation of the ethnographic results was structured²⁶⁴, which incorporates the different agents that influenced the construction of the story of the Blood Beech.

The second map had the purpose of ordering the conceptual field of Donna Haraway's thinking. To construct it, I wrote down the main categories²⁶⁵ that not only relate to each other, but also open the spectrum to various subcategories and examples that allowed to explain the intertwining of the main categories. A first major finding in this process implied that, from Haraway's perspective, the theory/methodology binary is also imploded. For this reason, it was decided to call this chapter "Theoretical-methodological framework".

In the same way, the map allowed to visualize that the crossings between relational ontology, cyborg figuration and situated knowledge are intertwined from theoretical, methodological, ontological, and narrative aspects. A last relevant aspect to consider is that this map has neither beginning nor end, that is, it cannot be understood in a linear way.

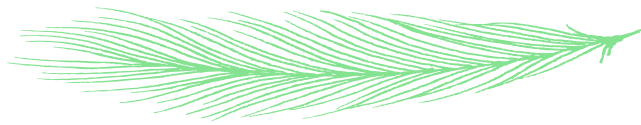
The third map aimed to link Haraway's thinking with the situations that emerged in the ethnographic map. For this purpose, it was chosen to construct the model based on the language of *Staying with the Trouble* (Haraway, 2020), which corresponds to an updated version of Haraway's thinking, and which focuses on discussing the challenges of a multispecies world. The work of this third model made it possible to situate the Blood Beech story in the Chthulucene and

analysis of relations among them. These maps are intended to capture the messy complexities of the situation in their dense relations and permutations" (Clarke, Friese & Washburn, 2015: 100).

²⁶³ While Clarke, Friese & Washburn (2015) and Haraway have slight differences regarding how to situate the post-human within the framework of Western thought. Such differences are not relevant to the discussion of this research. What is important is that both proposals focus on the relational and multispecies.

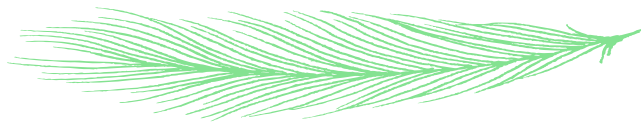
²⁶⁴ Section corresponding to the first part of the following chapter.

²⁶⁵ That is, the most relevant concepts of Haraway's thinking.



to understand, from that setting, the meanings of absences and inter-species relations. Within this model, the most important finding refers to the SF proposal. This proposal not only allowed us to understand the depth of what is involved in writing the story of the Blood Beech, but also reveals to a methodological tool that has the potential to transform and interweave a more livable world for all species. Indeed, SF opens up a range of possibilities for us to – collectively – address the current problems of ecological devastation. Consequently, this research adds to the movement of '*Staying with the trouble*'²⁶⁶. Once the three maps were ready, I proceeded to write this paper.

²⁶⁶ As already explained in the first part of the chapter, "*Staying with the trouble*" (Haraway, 2016) is an invitation to take charge of environmental problems and to work to generate improvements, partial healing, and multispecies justice.



CHAPTER 4: Results and analysis

4.1. Presentation of ethnographic findings

4.1.1. On the absence of the tree, changes in the landscape memory of the territory, and the bodily reactions of visitors²⁶⁷

The absence of the Blood Beech caused feelings of sadness, denial, and estrangement among park visitors. These feelings affected park visitors of different ages²⁶⁸. During the ethnographic conversations there were children who cried and adults who expressed their disapproval, sadness, and even a skeptical attitude about what will be done in the physical space where the Blood Beech used to be. In either case, people had fond of the tree, even pointing out that it was their favorite tree and the oldest specimen in the park.

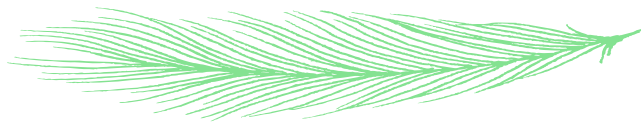
Different types of bodily reactions to the felling of the Blood Beech were identified that occurred when visitors became aware of the logging. Some of them were crying, not wanting to visit the place again, feeling disoriented and/or remembering other moments when they had lost other trees.

Similarly, visitors used their bodies – mainly eyes and hands – to look for any traces of possible disease in the remains of the Blood Beech – roots, stump. None of the participants who took part in the ethnographic conversations found any visible traces of the presumed disease.

However, all of us who were in search of answers had used our bodies in the same way to make our observations, that is, to perceive the situation through the senses of sight and touch. From this, the idea arose to try an observation of the territory by walking through the observation area blindfolded. As a result of this experimental observation, I was able to perceive complementary inputs that allowed to better contextualize the situation of the tree. Of these, the most relevant

²⁶⁷ The following quotes from the field diary were used to construct this section: [DE16421TAAA1], [DE17421TAAA2], [DE17421TAAA3], [DE16421TAAN1], [DE19421TAAN2], [DE1421DELLROP1], [DE1421DELLROP2], [DE1421DELLROP3], [DE28421DELLROP4], [DE28421CHOAT1], [DE14421CHOAT2], [DE19421CHOAT3], [DE1421UMCVT1], [DE19421UMCVT2], [DE30421UMCVT3], [DE17421DAFE1], [DE15421CPEGI1], [DE16421CPEGI2], [DE22421CPEGI3], [DE26421CPEGI4], [DE17421FMA1], [DE16421FMA2], and [DE14421FMA3] (“Coding of quotes from the field diary”, 2022)

²⁶⁸ Children, youth, adults, and seniors.



refer to the discovery of pipeline entrances below the observation area and the slight slope of the terrain.

In addition to the material dimension, the conversations and observations revealed the metaphorical use of the body to express the narratives constructed in relation to the Blood Beech, other trees, and the territory. For example, the association between wounds of human bodies, arboreal bodies, and territories; both when they “bleed” and when they “heal”.

On the other hand, the perception of the territory changed in the face of the logging of the Blood Beech. That is, not only was its absence evident, but questions also arose about the duration of the presence of other trees and micro-ecosystems in the park. For example, how long had young trees and flowers that had not had a major role in the landscape prior to the felling of the Blood Beech been in place²⁶⁹. At the same time, visitors noticed that other trees had also been felled during the same period.

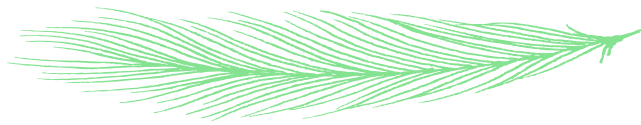
In summary, it is observed that the absence of the Blood Beech generates negative emotions in park visitors. In the same way, this absence stimulates processes of re-observation of the space where changes in the perception of the landscape are produced. To perceive the territory, the material and metaphorical body was an important tool. Consequently, this relationship between body and territory can be considered as metaphor, emotional response, and practical aspect in the perception of space.

4.1.2. Resignification of roots and second mourning process²⁷⁰

The felling of the Blood Beech implied a transformation in the park's landscape, and with it, changes in the forms of interaction that visitors used to have before and after the event. After the initial traumatic experience, a process of resignification of this absence began. Among the first reactions to this event were: 1) “discursive denial of the tree's absence”; 2) “photographing and

²⁶⁹ These trees and flowers surrounded the observation area and other areas of the park.

²⁷⁰ The following quotes from the field diary were used to construct this section: [DE21421NDAA1], [DE14321ICTYR1], [DE16421ICTYR2], [DE1421ICTYR3], [DE18421AEPLR1], [DE21421AEPLR2], [DE27421AEPLR3], [DE14421IPADLR1], [DE14421IPADLR2], [DE16421IPADLR3], [DE17421IPADLR4], [DE20421IPADLR5], [DE20421IPADLR6], [DE25421IPADLR7], [DE19421IPADLR8], [DE14421EFDUR1], [DE17421EFDUR2], [DE20421EFDUR3], [DE24421EFDUR4], [DE26421NLTD1], [DE17421PPLVMDLR1], [DE19421SQAHLR1], [DE19421RVPSPDR1], and [DE24421ADRIDV1] (“Coding of quotes from the field diary”, 2022)



climbing the stump as a new form of interaction”; and 3) the emergence of an “aesthetic appreciation of the roots”.

With respect to the discursive denial of the absence of the tree, there were participants who continued to refer to the tree as a being that was present in the space, that is, not as a “non-tree”, as an absent being, or a cut tree, but as an entity that remained in the zone of observation.

Once the tree was cut down, part of its stump and roots continued for a few weeks in the observation area. From this, visitors redefined their interactions with the stump and roots that remained in the space. These new interactions consisted of photographing and/or climbing the stump and its roots. This implied the recognition that there was no longer a tree, but there was still the possibility of interacting with a part of it.

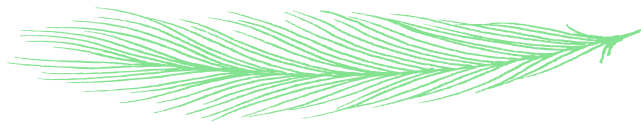
Time after the tree was felled, the roots were also removed. The Magistrat hired a private company of backhoe loaders and trucks to split and extract any physical remnants of the Blood Beech. They removed the roots, what was left of the stump, and even the soil surrounding it²⁷¹.

Once the scenery changed, park visitors had conversations about the aesthetic value of the roots²⁷². For them, the roots, besides being a reminder of the Blood Beech, were beautiful in their own right. There were even those who considered them “a work of art”. So, faced with this new event of transformation in the landscape, there were also a variety of reactions: 1) new mourning for the absence of the roots; 2) lost hope about the transcendence of the tree roots; and 3) decreased visits to the observation area.

As for the second grieving, i.e., that caused by the absence of the roots, visitors again experienced feelings of sadness, disorientation, nostalgia, and fear that more trees would be cut down. While visitors to the park knew – and disputed – the idea that the tree was diseased, they understood that “under that assumption” the Magistrat chose to cut the tree down. However, almost no one foresaw the decision to remove the roots. There were several visitors who thought that the roots

²⁷¹ After extracting the Blood Beech’s physical remnants the space was left as a “crater” or “big hole” without soil. Some time later it was full of sand.

²⁷² It is worth remembering that the roots of this Blood Beech were similar to those of the aesthetics of elephant trees. That is to say, an important part of them was above the ground, therefore, to reach the trunk it was necessary to climb up the roots.



would remain as compensation or reminder of what the tree had once been. In addition, they were aware that other park visitors were also having a good time interacting with the roots – for example, climbing them, sitting on the stump playing guitar, having their picture taken of them, touching them, among other activities. Indeed, only one participant reported that he had no illusions about the permanence of the roots and that he knew they would be removed²⁷³.

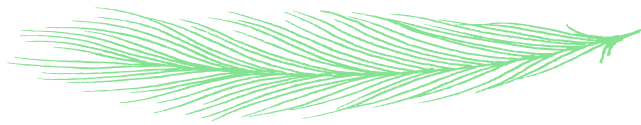
With respect to the lost hope about the possibility of transcendence of the Blood Beech from its roots, it was found that some visitors hoped that the tree had sprouted from the stump, since, from their perception, the stump was healthy. Similarly, in the process of extracting the roots, there were participants who felt the need to take a piece of the roots with them.

Similarly, there was a visitor who showed me a WhatsApp group discussion – among neighbors in the sector – whose topic was to understand if the tree – and subsequently the roots – were really dead. To answer that question, one had to make explicit what was meant by “alive” or “dead”. Regarding this particular issue, Paulina – biologist who participated in the research contributing with clarifications from her area- indicated that the idea of transcendence of the Blood Beech from its roots is debatable. Although the roots were “alive” in the sense that they continued to provide related ecosystem services to other living beings, it was not feasible for these roots to sprout.

Finally, after the removal of the roots, there was a noticeable decrease in the number of visitors to the observation area. Although there were people who came to briefly look at the fence, the hole and its subsequent filling with sand, there were no more interactions through touch.

In synthesis, in the absence of the Blood Beech, its roots and stump were re-signified. This resignification had aspects of commemorative – idea of remembering the tree –, practical – the stump as a new meeting space for climbing, insect shelter, etc. –, and aesthetic. Once the roots were removed from the space, the visitors suffered a process of re-traumatization or second mourning before a new loss, since there was the illusion that the tree would sprout again, or that

²⁷³ It is possible that this reaction is explained by the fact that this informant did not get to know the Blood Beech, therefore, he did not develop a link that could influence his need for transcendence through the roots.



through the roots a new way of understanding the presence-absence of the tree could be interacted with.

4.1.3. Incorporation of multispecies elements²⁷⁴

In terms of regulations, there is institutional recognition of the park as a multi-species space. This is represented in the behavioral guidelines that visitors must follow. In fact, the signage at the park's main entrance includes iconographies that refer to the expected behavior towards the park's flora and fauna.

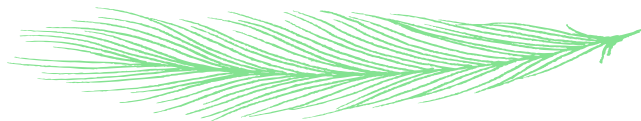
In addition, these signs include rules on how to visit the park with pets. For example, there is an area for dogs to play off-leash, there are areas where dogs can roam on leash, and there is an area where these canines are prohibited. The latter was explicitly delimited to protect the park's wildlife, i.e., some types of bees, snails, hedgehogs, butterflies, and lizards, whose photographs and basic information also appear on the park's signage.

In addition to the normative aspect, during the fieldwork it was possible to observe how the presence-absence of non-human agents influenced both human and non-human behavioral dynamics.

In the first place, the Blood Beech, in addition to having been a non-human agent with which park visitors generated a bond, was also a non-human agent that influenced the possibilities of non-human interaction. The ecological services it provided, and even continued to provide as long as its roots remained, are related to inter- and intra-interactions with other living beings, such as insects, squirrels, birds and other beings of the micro-ecosystem of that particular area of the park.

Secondly, it is worth noting the presence of non-human agents that influenced human reactions. For example, there are visitors who follow the walking route according to the will of their pets. Or there were times when the large number of wasps in the observation area prevented people

²⁷⁴ The following quotes from the field diary were used to construct this section: [DE15421LCPIRM1], [DE26421LCPIRM2], [DE17321IHSCSNH1], [DE1421IHSCSNH2], [DE20421AOSNH1], [DE1521AOSNH2], and [DE1521AOSNH3] ("Coding of quotes from the field diary", 2022)



from approaching. In both examples it is possible to appreciate how the behavior of non-human agents impacts the possibility that humans moved within the observed space.

In short, the park is a space of multi-species interaction, both at the discursive-normative and practical levels. In these interactions, the different species manifest their own will and have an impact, for example, on the way humans move within the park.

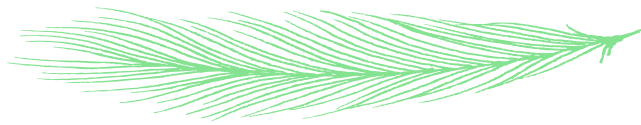
4.1.4. The Impact of trees on the personal histories of humans and the (ir)replaceability of the Blood Beech²⁷⁵

The ethnographic material indicated that trees could impact the personal histories of human persons in several ways. First, as agents present in family dynamics. Secondly, as activators of memory of personal experiences and milestones of the human-environment relationship.

With respect to the presence of trees in family dynamics, it was found that the generation of affectivity in human-trees relationships – and other natural beings – is presented as an emotional ability that develops in family contexts. For example, there were accounts from participants who indicated that visiting this – or any other tree – has been a family practice. In some cases, they even recognized practices such as hugging trees as part of the walk, or going to eat at the foot of the tree as a family, breastfeeding their children and taking a short nap next to the Blood Beech. Consequently, for some visitors, thinking about the tree was equivalent to thinking about their loved ones.

The absence of the Blood Beech also triggered other types of memories associated with the life trajectory of the park visitors. For example, for a person from Kurdistan, the absence of the tree implied the activation of memories of how war destroys nature, and the respective reflection that human beings should respect nature. Another similar example refers to a person who associated the Blood Beech with his settlement process in that district. For him, that tree was a symbol of

²⁷⁵ The following quotes from the field diary were used to construct this section: [DE1421IARPF1], [DE16421IARPF2], [DE17421IARPF3], [DE24421IARPF4], [DE26421IARPF5], [DE26421IARPF6], [DE21421IARPF7], [DE22421AHSMDP1], [DE24421AHSMDP2], [DE22421NHSVO1], [DE22421EECRHS1], [DE14421EECRHS2], [DE14421EECRHS3], [DE1521EECRHS4], [DE24421EEMRHS1], [DE24421EEMRHS2], [DE14421EEMRHS3], [DE16421EEMRHS4], [DE14421LMHSI1], [DE19421LMHSI2], [DE27421LMHSI3], and [DE27421LMHSI4] (“Coding of quotes from the field diary”, 2022)



those times. From these examples it can be deduced that, on the one hand, the feeling of sadness about the absence of the Blood Beech is shared, on the other hand, each visitor develops a particular sadness linked to other experiences of their life trajectory. Consequently, the stories about the absence of the tree have personal and collective dimensions.

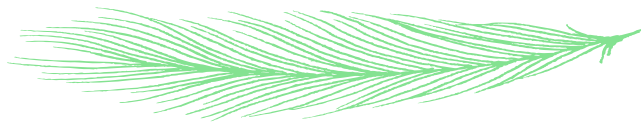
In addition to the information noted through the field diary, some participants wanted to write down their own memories evoking the Blood Beech. These remembrances are associated with special moments in their lives, as well as the acknowledgement that other humans have also generated a bond with the tree:

„Ich war wochenlang so traurig und bin nicht mehr hingegangen. Es wurde still und heimlich gemacht. Das war so ein prächtiger Baum, Schattenspender, Zeitzeuge, Geschichtenerzähler“ (Park Visitor, April 25, 2021. In ethnographic field diary).

“...ich habe dein Projekt so berührend gefunden, dass ich sofort das Foto herausgesucht habe (...). Ich würde mich freuen, dir wieder zu begegnen. Du siehst auf dem Foto nur wenig von dem Baum, dafür die wunderschönen, wellenförmigen Wurzeln, auf denen ich oft gesessen bin und wie hier meinen Sohn gestillt habe“ (Park Visitor, April 28, 2021. In ethnographic field diary).

“Vielleicht noch zur Geschichte: Ich bin mit meinen Eltern 1958 in diese Gegend gezogen und habe meine Kindheit, mein Erwachsenwerden hier in diesem Park verbracht. Der Baum war immer etwas Besonderes. Es gab ein Pfauenpärchen wild herumlaufend, viele Wildenten und 2 weiße Schwäne. Igel kamen am Abend und wir haben sie gefüttert. Aus dem Fenster streckten wir unsere Händchen mit Nüssen und es flogen uns die Meisen zu! Ich bin sehr glücklich das alles erlebt zu haben!... Ja so ändern sich die Zeiten!... Würde mich sehr freuen, wenn wir im Kontakt bleiben!“ (Park visitor, April 20, 2021. In ethnographic field diary).

„...hier ein paar Bilder vom Baum. Es war ein schöner Ort, der viel Ruhe ausgestrahlt hat. Im Frühjahr und Sommer saßen viele Leute rund um den Baum“ (Park Visitor, April 22, 2021. In ethnographic field diary)



From the above it is interpreted that the affective bond between humans and this Blood Beech can be associated to moments in the personal histories of individuals and their families²⁷⁶. This leads us to the discussion on the (ir) replaceability of the cut down the Blood Beech.

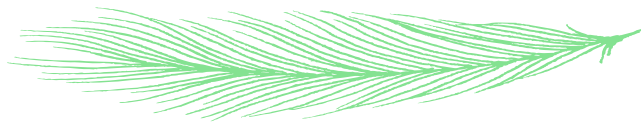
In the course of the fieldwork, it was obtained that the Magistrat was planning to transplant a new Blood Beech to replace the old one²⁷⁷. In reaction to the Magistrat's response, two types of discourse were observed among park visitors: ecological skepticism and emotional skepticism. It should be noted that these attitudes are not necessarily mutually exclusive, in fact, they complement each other.

In terms of ecological skepticism, arguments associated with the ecological services provided by that particular specimen of Blood Beech were recognized. One argument in this discourse referred to the fact that the contemporary form of silvicultural production is different from the production conditions of the original Blood Beech, i.e., the original Blood Beech had not been cultivated with contemporary chemicals and/or fertilizers. From this information, doubts arose from some participants as to whether the eventual new Blood Beech would be strong enough as the original. Another argument was that the carbon footprint of the original Blood Beech would not be offset by the carbon footprint of a younger tree. In any case, the young tree that would arrive would be a transplanted specimen, so it was already generating a carbon footprint capture before transplanting. Consequently, this capture volume could not be summed in absolute terms.

In relation to emotional skepticism, the arguments refer to the irreplaceability of the bond that humans built around the Blood Beech in particular. These discourses of irreplaceability emerged mainly from reflections on the memories built around the Blood Beech. For example, special moments they lived next to the tree, or daily experiences of visiting it. In this context, it is worth considering the age of some park visitors, who, being older adults, pointed out that they do not have so many years of life left to cultivate a relationship at the level of the one they had already

²⁷⁶ This is consistent with what I observed in some of the photographs that visitors sent and/or showed me.

²⁷⁷ That new tree was introduced to the park in autumn 2021. But for the purposes of this fieldwork, it meant that the discussion of replaceability took place several months prior to the transplanting of the New Blood Beech.



forged during their life trajectories with the original Blood Beech. In other words, they are not going to have the same time to cultivate comparable relationships with the new tree.

Within the above discussion, there were also participants who recognized a mystical dimension to the Blood Beech, which gave more strength to its irreplaceable character. These stories appealed to the soul of the tree and its magical character, even comparing it to the “Grandmother Willow” in the movie “Pocahontas” (Goldberg & Gabriel, 1995).

In synthesis, although the arrival of a new tree would allow the use of the physical site of the original Blood Beech, neither the calculation of ecological services nor the generation of emotional ties were remedied. Therefore, in both ecological and socio-spiritual terms the Blood Beech was not replaceable.

4.1.5. Four types of narratives in the face of the logging of the Blood Beech: Official Narrative, Dissident Narrative, Passive Narrative, and Imagined Narrative

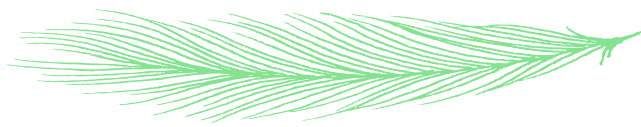
Four different types of narratives were identified from the ethnographic conversations. These interact with each other and allow us to argue that it is not possible to construct a single official truth, but rather a discussion between different points of view. Each of them is presented below:

4.1.5.1. Official Narrative²⁷⁸

This first type of account consists of the discourse made by the Magistrat workers, the park workers, and the workers who extracted the roots. These people interacted within an official organizational framework that was linked to a green area management policy. Therefore, their narratives interact from a hegemonic position, and they are the ones who have the fact to produce the official written sources as to why Blood Beech was cut down. Consequently, the official response on the situation of the felling of the Blood Beech is the following:

*„...sämtlicher Baumbestand der Wiener Stadtgärten in Parkanlagen und Alleen wird regelmäßig von Baumexpert*innen gemäß ÖNorm L 1122 kontrolliert. Anlässlich einer Begutachtung wurde festgestellt, dass sich der Baum im Absterben befindet und massive*

²⁷⁸ The following quotes from the field diary were used to construct this section: [DE19421TITCD1], [DE20421TITCD2] (“Coding of quotes from the field diary”, 2022), and the sources mentioned in the body of the text.



Holzschäden am Stammkopf aufweist (siehe Foto). Aus Sicherheitsgründen war somit dessen Rodung erforderlich. Rodungsgrund war Ziffer 1+3 des Wiener Baumschutzgesetzes. Als Ersatzpflanzung wird ein Großbaum Fagus sylvatica ‚Atropunicea‘, Stammumfang mindestens 50cm (!) im Herbst 2021 gepflanzt“ (Response sent by the Magistrat to one of the park visitors, who provided it to collaborate with the investigation on April 24, 2021. In ethnographic field diary, 2021).

As can be seen from the official response, there are legal and normative imperatives that support the arguments of the official account, which are given by the ÖNorm L 1122 and the Wiener Baumschutzgesetz. This does not mean, however, that the people who are supposed to safeguard this kind of story are exempt from sadness about the situation. Indeed, both the park workers and those who removed the roots also mourned the loss of the Blood Beech.

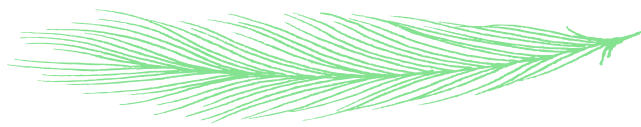
In short, the normative discourse of the official narrative responds to legal and institutional aspects of the City of Vienna. Consequently, those who speak from that place have a duty to safeguard that narrative. Nevertheless, they are not exempt from sensitivity with regard to the Blood Beech.

4.1.5.2. Dissident Narrative²⁷⁹

This second type of narrative consists of the discourse held by some park visitors who do not believe in the version proposed by the official narrative and are, therefore, discordant and resistant to the hegemonic position. This type of discourse is reactive and critical of environmental and park management. It also calls for citizen action. For example, within this group, there were some informants who wrote to or called the Magistrat to ask for explanations about what had happened. Likewise, they questioned why the tree's alleged illness could not be treated with medication²⁸⁰.

²⁷⁹ The following field journal citations were used to construct this section: [DE22421EAES1], [DE24421EAES2], [DE24421EAES3], [DE20421ETDDN1], [DE22421RRBEMM1], [DE22421RRBEMM2], [DE24421RRBEMM3], [DE26421RRBEMM4], [DE19421RRBEMM5], [DE20421CAET1], [DE28421CAET2], [DE30421CAET3], [DE22421EHSPMJ1], [DE24421EHSPMJ2] (“Coding of quotes from the field diary”, 2022), and the sources mentioned in the body of the text.

²⁸⁰ Indeed, the Magistrat in his official response did not specify what disease the tree had.



There were also those who checked the condition of the wood. Based on their knowledge, they indicated that the wood was in good condition and without a trace of any disease. For them, the Magistrat lied and did not present sufficient evidence of the alleged disease. In fact, the photo attached to the response emails includes a photograph taken after the tree had been pruned and at such a distance that it was not possible to verify any disease.

With respect to wood debris checks, no black holes or other signs of disease evident to the naked eye were found. One of the informants who most insisted that the tree was healthy is a professional gardener. In his view, if the tree had not been felled, it would have remained standing for 300 years. The account that the wood was examined, and no disease was found was reiterated by a large majority of the participants in this investigation ²⁸¹.

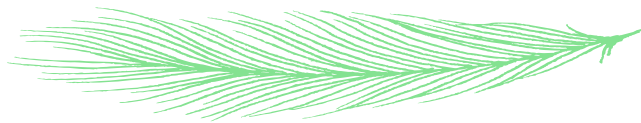
In addition to the practical actions that accompany this story, we observe the emergence of different conjectures or alternative hypotheses that would explain the logging of the Blood Beech. These conjectures refer to: 1) the Blood Beech was consuming too much water by park standards, i.e., an economic decision; 2) the installation of a pipeline underground could be related, since two years ago they had installed one just below the observation area, and on that occasion, they had felled two trees in the process. On that occasion, the Magistrat's official response also consisted of declaring the trees to be "diseased". So, either that pipe damaged the tree, or the roots of the tree could be a long-term danger to that pipe. Indeed, the alleged marks on the ground, which would correspond exactly to where the pipe is, are just a few meters from where the tree used to be ²⁸². In either of the two conjectures related to the pipeline, the departure of the Blood Beech would be explained by a political decision to protect the interests of the investment made by a private clinic located near the park ²⁸³.

Complementary to the above background produced through the ethnographic conversations, among the participants who volunteered to write stories about the Blood Beech, they also appeal

²⁸¹ For my part, I did the same as the other visitors. I took part of the tree roots and took them to two different biologists. Neither of them could prove that the pieces of wood I took had traces of any pests.

²⁸² As a complementary background, it should be noted that during the observation of the extraction of the roots, traces of old and unused pipes were also found. Photographs of these are available in the ethnographic diary.

²⁸³ The pipe would be part of the ventilation system of this institution.



to the fact that the death of the tree is associated more with political and economic aspects than with a disease:

„...Ich war schockiert über die heimliche Aktion. im Frühjahr war er schon brutal beschnitten. trotzdem dachte ich, es wird schon wieder wachsen...Seit er nicht mehr ist, meide ich diesen Ort und beginne Döbling zu verabscheuen. Es liegt wohl an der neuen politischen Gesinnung. Die ÖVP interessiert sich in erster Linie für finanzstarke Projekte und Finanziere, sie interessieren sich nicht dafür, wie Menschen, die keinen Balkon und Garten besitzen, diese Oasen und ihre treuen alten Bäume brauchen...Ich habe davorgestanden und geweint. Es war nicht zu sehen, dass er faul oder abgestorben wäre“
(Park visitor e-mail, April 25 2021. In ethnographic field diary) ²⁸⁴.

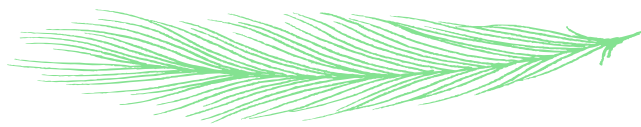
In addition to the explanations given by the informants, it is worth adding a complementary background that was also mentioned by visitors belonging to this group: The park has another Blood Beech, younger than the one that was cut down, which is protected by the City of Vienna as a natural monument of the park. Indeed, there is a register where the protected trees have a number and a plaque with information. For visitors, it was strange that this Beech was protected and not the cut Blood Beech, which was evidently larger and older.

In synthesis, the narratives that are inserted within this group contain a citizen distrust towards the way green areas are managed and relate the events that occurred with the Blood Beech to political processes in which other actors are involved (private clinic, political parties, etc.). In the same way, people who construct dissident narratives present proactive and critical attitudes towards the defense of the environment.

4.1.5.3. Passive Narrative²⁸⁵:

²⁸⁴ It should be noted that this email was titled “*BaumMORD*”, which reflects his attitude of denouncing what happened with the Blood Beech from a dissident and critical perspective with the official story.

²⁸⁵ The following field journal quotes were used to construct this section: [DE20421RAAHS1], [DE26421RAAHS2], [DE26421RAAHS3], [DE27421RAAHS4], [DE17421RAAHS5], [DE16421RAAHS6], [DE17421RAAHS7], [DE3521RAAHS8], [DE20421CHSPLE1], [DE20421CHSPLE2], [DE1421ETPDBEPF1], and [DE20421ETPDBEPF2] (“Coding of quotes from the field diary”, 2022).



This type of narrative was constructed by park visitors who remember the Blood Beech, miss it, and lament its loss. In spite of this, they trust the official story, and therefore accept with resignation the information provided by the Magistrat.

People belonging to this type of story accepted the idea that the Blood Beech was diseased. While none of them knew what disease the tree was suffering from, nor had they checked the stump, they felt that it was to be expected that the City of Vienna and its panel of experts would take care of diseased trees. Therefore, when a specimen became diseased, the City of Vienna was obliged to cut it down. Otherwise, it could be dangerous.

These people argued that sometimes removing trees and plants is necessary to give space and light to other specimens. This idea was pointed out in both garden and forest examples.

Although, for most of the visitors belonging to this group the cutting of the Blood Beech was a surprising process, there was a smaller group that accepted the cutting of the Blood Beech as a slow and expected process. This is because they had perceived that month after month this tree suffered some kind of intervention or systematic pruning.

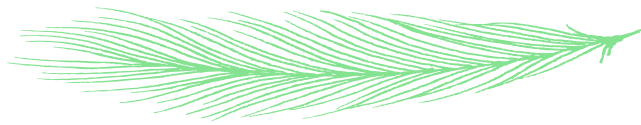
In short, people who belong to this type of story accept the official story with resignation, they do not show a proactive attitude, but they do grieve the absence of the Blood Beech.

4.1.5.4. Imagined Narrative²⁸⁶

This set of accounts refers to the reflections of visitors who did not know or do not remember the Blood Beech. Members of this group approached the observation area and participated in the research because they perceived something missing, or else they got to interact with the stump and roots.

For them, the Blood Beech was imagined as a tree that was very large, important, and ancient. Many of them made this projection from the majesty of the stump and roots. Others, from the

²⁸⁶ The following field diary citations were used to construct this section: [DE17421IQUAMG1], [DE16421IQUAMG2], [DE17421IQUAMG3], [DE19421IQUAMG4], [DE21421IQUAMG5], [DE16421NCAAPET1], [DE21421NCAAPET2], and [DE1521NCAAPET3] ("Coding of quotes from the field diary", 2022).



stories that other visitors had narrated. In both cases, visitors also experienced an emotional reaction of sadness for the absence of a tree with these characteristics.

In synthesis, the state of the landscape of the observation area shows the absence of something, this emptiness generates questions and, in some cases, imagined stories, which also provoke an emotional reaction in people.

4.1.6. A community in search of memory²⁸⁷

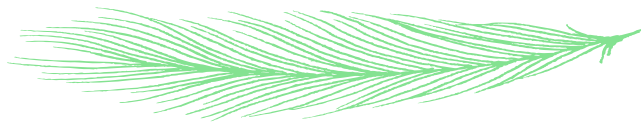
One of the most surprising findings about the absence of the Blood Beech refers to the fact that this was not only perceived as an individual-tree relationship, but can also be analyzed on a collective level, i.e., community-tree. Thus, through the ethnographic conversations, individuals discovered that they were not alone in their grieving process. An example of this refers to this e-mail message I received after asking Elisabeth if she wanted her name to appear in the acknowledgements of this research:

„Irgendwie sollte es so sein, dass ich doch noch mal in den Park gegangen bin und Sie getroffen habe! Es hat mich glücklich gemacht, dass ich nicht allein bin. Gerne helfe ich bei der Studie mit und werde auch gern namentlich genannt werden. Es ehrt mich. Ich habe liebe Facebookfreunde, die mit uns fühlen und sicher auch gern helfen, damit wenigstens andere Zeitzeugen stehen bleiben“ (Park visitor, April 26, 2021, emailed message. In ethnographic field diary).

The transcendence of the perception of the absence of the Blood Beech from the individual to the collective level allows the gestation of the foundations of an imagined community²⁸⁸ that is reactively constructed through the sensation of loss or sadness for this tree. This community was made up of children, adolescents, adults, and elders who had been impacted by the loss. The

²⁸⁷ The following field journal citations were used to construct this section: [DE16421EJEND1], [DE19421CDADA1], [DE20421CDADA2], [DE22421CDADA3], [DE26421CDADA4], [DE28421IPSQPOV1], [DE17421IPSQPOV2], [DE3521IPSQPOV3], [DE19421IPMDLI1], [DE17421IPMDLI2], [DE3521IPMDLI3], [DE4521IPMDLI4], [DE4521IPMDLI5], [DE18321IPCCIM1], [DE1521IPCCIM2], [DE24421FEDEPPLA1], [DE28421FEDEPPLA2], [DE30421FEDEPPLA3], [DE3521FEDEPPLA2], and sources mentioned in the body of the text (“Coding of quotes from the field diary”, 2022).

²⁸⁸ By “imagined community” I am not referring to the national connotation that Anderson (1991) gives to the concept, but rather to the intersubjective practices of meaning that link a group of people, a definition proposed by Boyarin (1995).



need to process this loss is possibly an extra motivation to carry out work related to the tree at school²⁸⁹, to share photographs of it, and also to collaborate in this research.

With respect to participating in this research, the participants showed special interest in knowing what the other participants thought about the situation of the Blood Beech and to talk about it, creating an “imagined community”. In the same way, an attitude of monitoring the progress of this research was developed. This interest also implies a proactive and participatory character where visitors offered information or visual material to collaborate in the progress of the research. Some visitors have even expressed interest in reading the final document on this research. At the same time, the discussion about the events of the Blood Beech awakened interest and the need to generate organizational links for the protection of the park's trees.

In synthesis, the absence of Blood Beech produces processes of transcendence from the individual to the collective where individuals recognize themselves as part of an imagined community. Therefore, the feeling of emptiness or loss seeks to be compensated by interpersonal recognition, either to collaborate in the processes of remembrance of the tree, or to protect other trees.

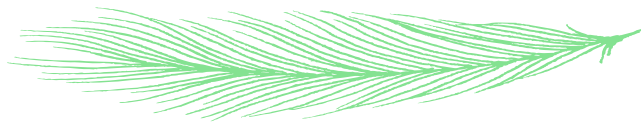
4.2. Analysis

To answer the research question there are three central aspects to analyze: What is the Blood Beech from Haraway's thinking; how is the Blood Beech inserted in a relational context; and how is the interweave of the narratives associated with the life and death of the Blood Beech produced? The following three sections answer these questions.

4.2.1. The Blood Beech, a cyborg, a companion specie, an oddkin, and a semiotic-material node

The Blood Beech, besides having been an organism of the vegetal world of the type *Fagus sylvatica Atropunicea* -*Sämlings Blutbuche*, is a semiotic-material node that – in life – could be associated with the figures of cyborg (e.g., Haraway, 2004c), companion species (e.g., Haraway, 2017a), and an oddkin (Haraway, 2020b).

²⁸⁹ A group of teenagers from a school near the park also carried out educational activities regarding the logging of the Blood Beech.



With respect to its cyborg character, it should be noted that the Blood Beech was an organism created outside the culture-nature binomial. Its existence – like all Blood Beeches – is due to a naturalcultural²⁹⁰ context where, with the help of technology, humans assist in the reproduction of an organism that mutated from the Red Beech²⁹¹. Blood beeches are cultivated because they are popular for parks and gardens. This implies that their habitat is usually a type of urban forest. As noted in Chapter 2²⁹², urban forests are also understood as a space where the “city-nature” binomial is transgressed and influenced by human and more than human agencies. Indeed, the choice to grow Blood Beeches is influenced by debates on urban forestry and the perception that such trees are suitable for co-existence in urban space.

In the case of the Blood Beech of this research, it was planted in the Wertheimsteinpark by humans, watered by irrigation technologies devised by humans, monitored by humans, pruned by humans, and subsequently felled by machines invented and directed by humans. All these actions show that the life trajectory of the Blood Beech does not refer to an organism on its own, but to an entity that lived and died in relation to co-constitutional processes²⁹³ in inter- and intra-action²⁹⁴ with other organisms, artifacts, and technologies. How these relationships operated was also mediated by economic²⁹⁵, aesthetic²⁹⁶, political²⁹⁷, and ecological²⁹⁸ factors.

At the same time, as also explained in chapter 2 – specially through Rival’s ideas (1998) –, trees are understood as organisms that symbolically transgress the life-death binomial. Due to their phytological characteristics, it is very difficult to identify the exact moment when a tree dies. In the case of the Blood Beech studied, ethnographic data show that even after it had been cut

²⁹⁰ This concept was already explained, in the section “Relational ontology: Apparatus of bodily production and abolition of binaries” of this document. For more details read, for example, Haraway (2017a).

²⁹¹ The difference is that Blood Beeches have one less enzyme than Red Beeches.

²⁹² Especially via the arguments of Van Herzele (2015) and Duempelmann (2019).

²⁹³ The discussion of co-constitutional processes was explained in the section “Relational ontology: Apparatus of bodily production and abolition of binaries”. For more details read, for example, Haraway (2017a).

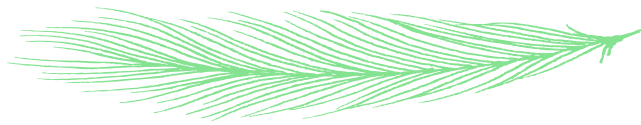
²⁹⁴ The concepts of inter- and intra-action were explained in the section “Sympoietic systems: making-with, thinking-with, and becoming-with”. For more details read, for example, Barad (2012) or Haraway (2020i).

²⁹⁵ If the cultivation of blood beeches were not profitable, other trees would be planted.

²⁹⁶ The particular aesthetics of this type of tree, its majesty, its colors, the shape of its roots, make this specimen a being that embellishes the perception of space.

²⁹⁷ The City of Vienna has a green space management policy.

²⁹⁸ The ecological services provided by this type of tree are valued.



down, there were humans who continued to believe that the roots were alive and that a new shoot could emerge from them. This is consistent with interpretations of how the wood of trees symbolizes the ambivalence of life and death.

Consequently, a Blood Beech can be considered as a cyborg from the perspective of transgressing boundaries, mainly, in the discussions of the culture/nature and life/death binomials²⁹⁹.

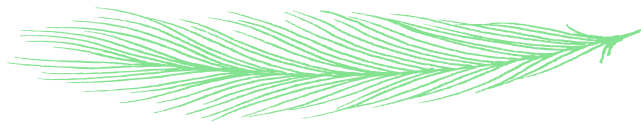
In relation to the dimension of the Blood Beech as a companion species (Haraway, 2017a) it is not possible to speak of “co-evolution” (e.g., Haraway 2008f, 2017a, 2017d, 2017e) but it is possible to understand it as a species that “becoming-with” (Haraway, 2020a, 2020f). In the case of human-tree relationships, visitors who frequented the park recognized this specimen as a “significant otherness” (Haraway, 2027e). This becoming-with not only referred to park visitors, but also to the ecological services that the tree provided for the reproduction of the ecosystem and its critters, e.g., relationships with insects, birds, mammals, reptiles, etc. So, the Blood Beech was a companion species that lived-and-died in the park, and its corporeality allowed for instances of “becoming-with” others.

The recognition of the Blood Beech as a significant otherness can also be explained by the approaches discussed in Chapter 2 on the affective turn³⁰⁰. That is, beyond language, the performativity of bodies creates relationships that were not only based on valuation for the ecological services the tree delivered, but for the psychological and social effects of its presence as an organism. Humans, through their senses, could touch, smell, see, and feel the tree. These bodily interaction processes stimulated the creation of an affective relationship.

At the same time, according to the ethnographic data, the Blood Beech was present in family and social moments of humans who carried out their activities around it. This fact implies that humans built shared remembrances with it. While it is not possible to speak of a “cult” of the Blood Beech in the same way as the collective examples described by Rival (1998) in Chapter 2, it is possible to affirm the performance of secular rituals associated with the tree. For example, when visitors

²⁹⁹ The discussion of the binomials was explained on the section “Relational ontology: Apparatus of bodily production and abolition of binaries”. For more details read, for example, Haraway (1998a).

³⁰⁰ Especially the ideas from Jones (2015).



had picnics, went to nurse a baby, read, napped, among other activities that humans habitually and systematically performed around the tree.

According to Haraway and her motto of “making kin” (Haraway, 2020d), the Blood Beech can also be interpreted as an oddkin. From the author’s point of view to love means to be in connection with “significant otherness” (e.g., Haraway, 2020i). Consequently, multispecies kinship relationships are based on caring and nurturing ties. Park visitors, especially those who belonged to the dissident narrative³⁰¹, demonstrated the valuing of these bonds through their constant concern to clarify the situation of the Blood Beech’s alleged illness and other aspects associated with multispecies grief³⁰² that will be addressed in the last section of this chapter.

Assuming what has been said in the previous paragraphs, it is possible to understand the Blood Beech as a semiotic-material node³⁰³. As explained in chapter 3, the notion of the semiotic-material refers to the union of the carnal and semiotic dimensions of a given figure (Haraway, 2004). In the case of the Blood Beech, it was observed how its body, that is, its material dimension, impacted semantic aspects of the order of the construction of emotions, remembrances, and stories by the visitors; political-administrative and technical aspects for those who belonged to the official narrative group; and ethical-discursive aspects for the current debates on how we construct and treat naturoculture, that is, an entity that is part of the discursive universe of nature as a rhetorical trope.

4.2.2. Wertheimsteinpark as sympoietic system, multispecies encounter, and platform for thinking about Chthulucene

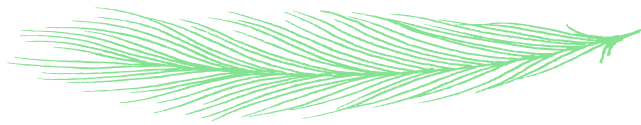
The Blood Beech lived and died in the Wertheimsteinpark. This space is understood as a multispecies territorial context. In it, different species intra- and interact³⁰⁴ on different levels. First, from the category “Incorporation of multispecies elements”, explained in the first part of

³⁰¹ Details were explained in section “Dissident Narrative”.

³⁰² This concept was discussed in the section “Semiotic Narrative Practices for the cultivation of response-ability and partial healing”. For more details read, for example, Haraway, (2020i).

³⁰³ This concept was discussed in the section “Relational ontology: Apparatus of bodily production and abolition of binaries”. For more details read, for example, Haraway (2004).

³⁰⁴ This concepts were explained in the section “Sympoietic systems: making-with, thinking-with, and becoming-with”. For more details read, for example, Barad (2012) or Haraway, (2020i).



this chapter, it was observed how this space operates on a normative level where, through signage, it is regulated which behaviors are appropriate for a co-existence between species. For example, the prohibition of dogs accessing some areas of the park for the protection of the park's wildlife.

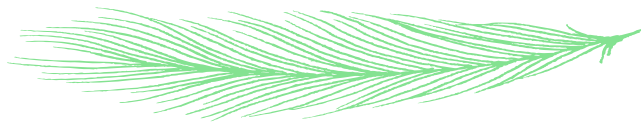
Secondly, there is a practical-performative level in which the species living in the park interact with each other and provide ecosystem services³⁰⁵, that is, they operate as a “sympoietic system” (Haraway, 2020i). For example, birds make their nests in the trees, hunt insects on the different surfaces of the park; insects use and form spaces above and below ground, collaborate with pollination, and are food for other animals living in the park; flowers interact with insects and generate particular scents according to climatic conditions, etc.

Humans, especially park staff, intra- and interact to monitor these processes – watering, fertilizing, pruning, transplanting, etc. On the other hand, park visitors photograph, smell, touch different species. There are also some who overflow the garbage cans, then crows scatter the garbage, insects – and possibly rodents – go for the food scraps, and eventually, another human collects and cleans up the garbage.

Pets of human also interact, sometimes with flora, sometimes with fauna, and even with other humans. Humans meet and talk about park specimens. Thus, through their visits, their work, or interactions with their pets, humans become part of this symbiotic system.

According to Haraway (2020i), sympoietic systems are co-constituted through symbiotic assemblages whose entities do not pre-exist the relationship. This means that the human and non-human entities present in the park contribute to different socio-ecological dynamics of the park, and are what they are, because of their contributions to the system. Consequently, from Haraway's perspective (2020), humans and non-humans co-create a reality in a given space-time, an action she calls “terraforming” (Haraway, 2020i). The fact that Wertheimsteinpark is terraformed by different species, and that park visitors also include in their talks: reflections on

³⁰⁵ Details of ecosystem services were explained in Chapter 2, section “Ecological dimension” based on the ideas of Van Herzele (2015) and Duemperlman (2019).



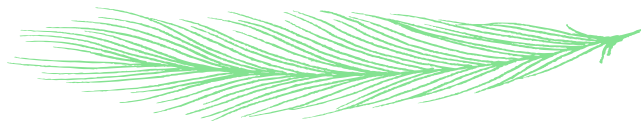
the behavior, agency, and/or absence of non-human beings, allows us to understand this space-time as a platform for the activation of Chthulucene narratives.

For Haraway (e.g., 2020d), living in the Chthulucene implies the understanding of the agency of more than human entities in a context where there is a commitment to protect the refuges. Protecting the shelters is important because these are the places where processes of constant regeneration – biological and cultural – of multispecies symbiotic assemblages occur. To live in the Chthulucene is to think and act for the continuity of the 'live-and-die-with' cycles.

The above process can be integrated by looking at the behaviors of the different narratives associated with the Blood Beech logging. In the case of the official narrative, ensuring the live-and-die cycle would be driving the decision to plant a successor Blood Beech³⁰⁶. From the viewpoint of the dissident narrative, the process is integrated from the critical and skeptical view of the official narrative, the ethic of respect and care for the Blood Beech, and the protection of the other trees in the park that would also be in danger of being categorized as “sick” and, consequently, cut down. With respect to the narrative of resignation, thinking and acting for the continuity of the cycles, it is expressed in the discourse that sometimes it is necessary to eliminate a specimen to guarantee the continuity of the “garden”, “park”, or “ecosystem”. In relation to the imagined narrative, the process is observed in the emotional and reflexive reaction to the fact of cutting down a tree.

In short, the Blood Beech is inserted in a relational context framed by the Wertheimsteinpark, whose web of relationships between park visitors, their pets, park workers, the Magistrat, protected wild animals, wasps, insects, birds, the Young Blood Beech, new trees, flowers, political decisions, technologies, artifacts, the future successor beech, laws, norms of behavior, the discourses on nature as tropes, and many entities co-constitute a sympoietic system. Such a system, moreover, operates as a platform for the interaction of different narratives associated with the Chthulucene.

³⁰⁶ This is in response to the management regulations for green areas, in which trees are replaceable entities by specimens belonging to the same species. As observed in the example of the Kaiserbuche in Salzburg.



4.2.3. Narratives, a network of situated knowledge and SF

“Importa qué materias usamos para pensar otras materias; importa qué historias contamos para contar otras historias; importa qué nudos anudan nudos, qué pensamientos piensan pensamientos, qué descripciones describen descripciones, qué lazos enlazan lazos. Importa qué historias crean mundos, qué mundos crean historias” (Haraway, 2020f: 35).

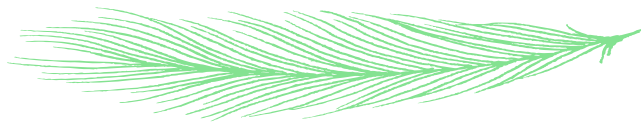
To account for how the interlacing of the narratives associated with the life and death of the Blood Beech takes place, it is worth making explicit what ideas linked these narratives. For Haraway (e.g., 2020c, 2020d) the heart of feminist speculative fabulation arts is thinking-with-others. In the same way that she developed her proposal of SF from the inspiration of Marilyn Strathern's ideas *“It matters what ideas we use to think (with) other ideas”* (In Haraway, 2020f: 34, footnote 5); I draw narratives from Haraway's ideas of situated knowledge and SF.

Indeed, we never think alone, just like ontology, our thinking is relational. What I think and feel about the history of the Blood Beech is also a process that has been intertwined with the stories, thoughts, and feelings of all the people cited in this ethnography. That is, it is part of “thinking-with” and “becoming-with” (e.g., Haraway, 2020a, 2020g).

The construction of the stories about the Blood Beech was carried out from a methodology of situated knowledge (Haraway, 1988). As I pointed out in the introductory chapter, the mere fact that I chose the situation of the Blood Beech as a research topic responds to the not innocent interests of being able to work collectively on the sensation of absence in the face of the felling of the tree. Consequently, I recognize that Blood Beech as a significant otherness and situate myself as a “member of the community of friends” of the tree. Therefore, my intention was to deconstruct an official truth and identify various interacting narratives about it.

The emergence of constructed narratives is understood on the basis of carrier bag theory of fiction (Le Guin, n.d. In Haraway 2020g). As explained in Chapter 3³⁰⁷, this theory points out that narratives must be concave in order to be able to take something in, having the capacity to give

³⁰⁷ In the section “Semiotic Narrative Practices for the cultivation of response-ability and partial healing”. For more details read, for example, Haraway (2020g).



and receive. Through the ethnographic conversations it was possible to welcome and “collect” – as if they were seeds – the partial visions of different types of visitors to the park. The “seeds” collected in this “bag” refer to the ideas, remembrances, emotions, conjectures, criticisms, materials, lived experiences, and ways of understanding the world of the study participants.

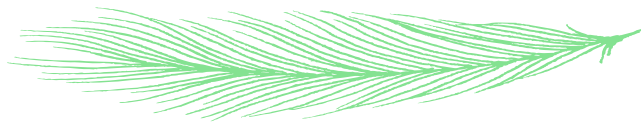
These partial visions³⁰⁸ were gradually linked in the context of conversations and conversations about other conversations. That is, I gradually integrated the information that the other visitors shared in “the bag”, thus generating a network of conversations and the process of “thinking-with”. The fact that the participants collaborated at different times implied assuming the dynamics of the “cat’s cradle game” (Haraway, 2020f), since, from each conversation, the stories were configured as string figures. The knots of these “string figures” depended on information from participants who had already collaborated in the “bag”. From this process of give and take, alternative narratives were generated that dialogue with each other in the face of the official narrative.

As observed in the presentation of the ethnographic results, the four narratives constructed present divergent visions. Although the official narrative enjoyed epistemic privilege³⁰⁹, the articulation of this narrative with the other narratives made it possible to confront and diversify the “truth” constructed by the hegemonic narrative, and to make room for visions situated at other scales. While the official narrative operated from an organizational scale and a relationship of “management” of the tree, the dissident and passive narratives were formulated from a human scale relationship of “face to face” with the Blood Beech. Similarly, the imaginary narrative was constructed from the ideas and values that humans had with the category “tree”.

From Haraway’s thinking (e.g., 1988), none of these narratives is innocent, they are all situated from different partial visions and are influenced not only by the discussion about whether the Blood Beech was sick or not. The narratives of the cutting of the Blood Beech are an interweaving of economic, political, technoscientific processes, power relations, among others.

³⁰⁸ The concept of “partial vision” was explained in the section “Ethnographic information production process” based on Haraway (1988).

³⁰⁹ The concept of “epistemic privilege” was explained in the section “Ethnographic information production process” based on Haraway (e.g., 1988, 2018e, 2018g).



An essential element in the interlacing of the stories was that there was a collective need to clarify how the events that occurred with the Blood Beech unfolded and to generate interpretations of them. The shock produced by the felling of the tree, and subsequently the extraction of its roots, evoked in park visitors an awareness of an absence, and with it, the beginning of a multispecies mourning process. As noted in Chapter 3, based on the ideas of Haraway (e.g., 2020b, 2020h, 2020g, 2020i), Despret (n.d. In Haraway, 2020g), and Van Dooren (2014. In Haraway, 2020g), mourning consists of generating an active presence of the dead. In the case of the Blood Beech this process involved sharing what this transformation of the landscape implied personally and collectively³¹⁰.

From this perspective, mourning is understood as a process of semiotic-practical activation where we make present, in this case, a significant non-human otherness, including an oddkin³¹¹. Grievances also implied a warning message about the potential risks of losing other non-human beings, i.e., other trees in the park. Thus, these griefs are a call to cultivate the response-ability of living on a damaged planet³¹².

Similarly, the roots and the crater³¹³ were traces that needed to be adopted in a framework that would give them meaning. The attempt to make sense of the felling of the tree initiate a discursive and practical space, in which different explanations and evocations of the events, i.e. narratives, compete. Consequently, the area where the Blood Beech used to be was a determined time-space to interact and generate narrative.

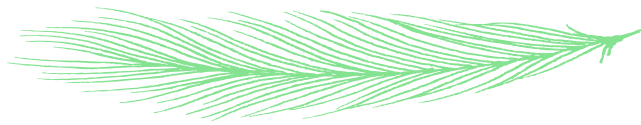
The case of the Blood Beech raises our awareness of what it means to live in “ruined spaces” (Tsing, 2017). Hence, the need to collectively build processes of partial healing and promote practices and reflections associated with multispecies justice. The stories about the Blood Beech open an opportunity to work not only with the living, but also with the dead, and the agencies of

³¹⁰ Including multispecies reflections and consequences.

³¹¹ Both terms were explained in the section “Making oddkin” based on Haraway (e.g., 2020d, 2020i).

³¹² This discussion was explained in the section “Semiotic Narrative Practices for the cultivation of response-ability and partial healing” based on Haraway (e.g., 2020g).

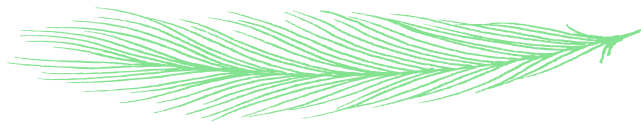
³¹³ Landscape transformation after root extraction.



absences. The Blood Beech, and its associated stories, is a call to be “Speakers for the Dead” (Haraway 2020i).

To identify with the idea of considering the history of the Blood Beech as a Speakers for the Dead implies that, even though that particular tree is no longer alive, I – and possibly many participant of this research – remain tied to the semiotic-material knots of the Blood Beech, and therefore to the challenges of staying with the trouble, cultivating response-ability, and constructing stories from the Chthulucene³¹⁴. That is, tying in urban policies, environmental protection, park management policies, forms of tree production, collective care relations with park visitors, citizen oversight of green areas, multi-species justice, local territory, local activism, among others.

³¹⁴ All these terms were explained in chapter 3 and are part of Haraway’s thinking (e.g., 2020d, 2020g, 2020i)

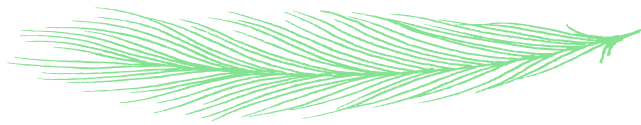


Chapter 5: Conclusions: Answering the research question and an example of Speculative Fabulation from the Blood Beech narratives

5.1. Synthesis and answer to the research question

The research question of this study was: *what elements of Donna Haraway's thinking are present in the interlacing of narratives about the felling of the Wertheimsteinpark Blood Beech?* To answer this question, Chapter 1 contextualized some particularities of the Blood Beech as a specie cultivated for gardening purposes in Austria. General background information on the Wertheimsteinpark as the place where this tree lived and died was also provided. This background includes a description of different types of visitor profiles in the park. The objective of this chapter was to introduce the basic aspects of the Blood Beech, the place where it was located and the profile of humans who interacted daily in that space. Consequently, the most relevant ideas are: 1) The Wertheimsteinpark belongs to the Döbling district of the city of Vienna and has different spaces. One of them is the area in front of the Döbling Museum, where the Blood Beech was located; 2) The park's visitor profiles are diverse, cosmopolitan, and multilingual. Within this diversity, most of the visitors are residents of the city of Vienna and frequent the park on a daily basis; and 3) Blood Beeches – as a species – are a mutation of the Red Beech, sharing with the former the characteristics of the wood and the shades of the leaves, but differing in that Blood Beeches are cultivated by pruning and generate their “elephant roots”.

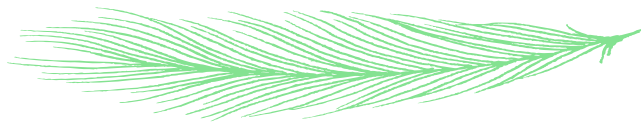
Chapter 2 presented a synthesis of different ways of problematizing human-tree relationships, specifically in the symbolic-religious, ecological, economic, socio-political, and affective dimensions. The objective of this chapter was to provide the reader with background and diverse examples where human-tree relationships are linked to more abstract dimensions of bio-social functioning. The most relevant results of this chapter are: 1) Tree symbolism is present in different dimensions of human life. On the one hand, in thoughts about life, death, cycles, interpersonal and social relationships. On the other hand, in the development of ideas that contribute to the practice of rituals – religious and secular – that translate into forms of environmental care; 2) The narrative of valuing the ecological services provided by trees implied the development of urban forests. The creation of these spaces is influenced by diverse actors and interests – scientific,



bureaucratic, residential, among others; 3) Environmental management and innovation is influenced by power relations, which, in the context of the neoliberal system, generate interpretations of trees and urban forests as commodities managed within the framework of market relations; 4) Both humans and trees have agency in urban space. In the case of trees, even though they are part of the urban space by a political decision, their agency influences both human behaviors and the construction of urban space; and 5) Trees, as species and particular individuals, are subjects of affection.

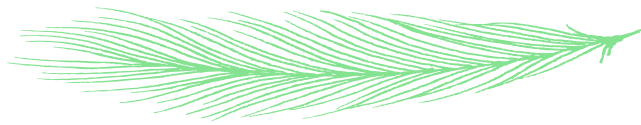
Chapter 3 aimed to present the theoretical-methodological framework of the research. The first section begins with a justification of why Donna Haraway was chosen as the guiding author to think and interpret the ethnography of the Blood Beech. Subsequently, the concepts most commonly used in the author's proposal are developed, i.e., the figure of the Cyborg, relational ontology, the Chthulucene, companion species, oddkin, sympoietic systems, situated knowledge, response-ability, and SF. Once the concepts and the relationships between them were clarified, we proceeded to account for the ethic-methodological decisions that supported the research process.

As a result of the first part of the chapter we obtained that: 1) The choice of using Donna Haraway as a guiding author is based on the fact that the themes that this author has worked on are adequate to answer the research question from a feminist, situated, multispecies perspective, and inserted in the contemporary discussions of the ontological turn; 2) The figure of the cyborg invites us to recognize ourselves as non-innocent creatures, partial, imploded, and inserted in a network of semiotic-material nodes; 3) Building worlds from relational ontology implies paying attention to co-constitutional processes and not to previous categories. This implies focusing on the relations and apparatuses of bodily production. Likewise, from this perspective, the idea of subject/object separation becomes obsolete; 4) There are several contemporary narratives regarding geo-ecological eras in the context of environmental devastation. Among them, Chthulucene is a proposal that invites us to take charge in the horizon of a multispecies eco-justice. To take charge means to commit ourselves to *staying with the trouble*, to cultivate response-ability, thinking-with, and weave alliance networks with everything and everyone who is available (technologies, humans, art, science, animals, plants, bacteria, narratives, etc.); 5) Learning to tell



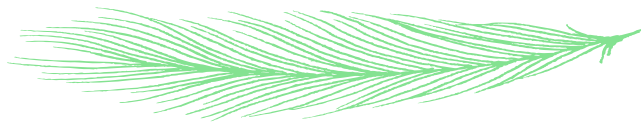
multispecies narratives implies recognizing the role of companion species and the relationships we co-make with them; 6) Building oddkins based on the ethics of care allows us to strengthen ecological assemblages and *staying with the trouble*; 7) We are part of symbiotic systems at different scales, the inter and intra-action of our relationships terraform, and consequently, have agency in the processes of co-construction of these systems. Understanding this makes us aware of the importance of guaranteeing the continuity of symbiotic relationships and acting in the face of the processes of cracking of these relationships. 8) The above ideas can be approached methodologically on the basis of the proposal of situated knowledge. This promotes partial and non-innocent conversations and embodied visions as a critical alternative to the form of knowledge production proposed by the modest witness; 9) In the framework of the Chthulucene, situated knowledge incorporates SF as a new methodological tool, which ties together different concepts that accompany the Scientific Fact, these are Science Fiction, Speculative Fabulation, Speculative Feminism, String Figures. The combination of these different elements allows us to generate models of art-science and multispecies narratives that let us to *staying with the trouble*, and flourish. That means partial recovery of Terra's shelters; 10) In the field of the configuration of multispecies narratives, applying the carrier bag theory of fiction allows us to generate processes of giving and receiving in which we generate 'becoming-with'. These narratives must be Gaia stories and not exclusively human. Moreover, they must incorporate present and possible futures. Within this group of multispecies narratives, the role of Speakers for the Dead refers to practices of remembrance and mourning that seek to promote processes of partial healing and to advance the struggle for the continuity of ecosystems. 11) the SF of "Stories of Camille" is an example of speculative fabulation that encompasses all of the above ideas and a call for others to take up the baton and knot more Gaia stories to this world configuration.

From this discussion, a methodological framework was developed to support this research, whose main decisions consisted of: 1) Recognizing my partial vision as a researcher and interweaving it to the other partial visions of those who wanted to participate in the research process. This implied the use of embodied, situated, participatory, and reflexive strategies. Within all of them, the most important choice for interlacing the narratives was to conduct ethnographic



conversations; 2) As for the writing process, the construction of situational maps was of great help to visualize the relationships between concepts and ethnographic information.

The objective of Chapter 4 was to present and discuss the ethnographic results in relation to the bibliographic results. Based on this, the first part of the chapter focused on reporting the most important findings of the fieldwork. These were structured on the basis of the categories obtained in the ethnographic situational map. The main results of this section indicate that: 1) The absence of the Blood Beech generated an impact on park visitors. They experienced emotional reactions – sadness, anger, disorientation, crying, etc. – and reflexive reactions – activation of processes of re-observation of the landscape in general and of the material remains of the tree – wood, roots, stump, crater, respectively. For both processes, the body was a channeling tool; 2) The absence of the Blood Beech was re-signified from new interactions with the roots and stump. Once the process of extraction of the roots was carried out, the visitors experienced again the sensation of emptiness and decompensation in the face of the transformation of the landscape; 3) The Wertheimsteinpark is a multispecies meeting place in both normative and practical dimensions; 4) When it was announced that a new tree would be planted to replace the Blood Beech, there were skeptical reactions regarding ecological and emotional compensations; 5) There were four types of narratives about the felling of the Blood Beech, which are mutually intertwined: The Official Narrative – determined by a normative and institutional context, occupied a hegemonic position, was associated with the control of information and written sources; The Dissident Narrative – constructed from a reactive and critical discourse on the Official Narrative. This narrative expressed a citizen distrust of the procedures carried out by the Magistrat, therefore, he contacted the institution and checked the stump; the Passive Narrative – characterized by a discourse of resignation of the events and acceptance of the Official Narrative; and the Imagined Narrative – which corresponds to a narrative constructed from agents who feel the lack of something they did not know, however, upon seeing the traces of the past (roots, fence, etc.) and interacting with other agents who did know the Blood Beech, they imagine a large, important and ancient tree. Therefore, they also experience the emotions described by the mourning process developed in the other memories; and 6) The Blood Beech generates processes of transcendence



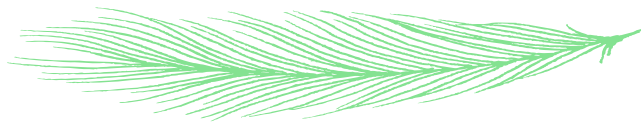
from the individual to the collective where individuals recognize themselves as part of an imagined community.

The second part of chapter 4 discussed three central aspects to answer the research question. The objective was to explain and interpret the ontology of the Blood Beech from Donna Haraway's thinking, including its relational context and the processes interweaved to its life and death. From this, the most relevant results are: 1) The Blood Beech is understood as a cyborg, a companion species, an oddkin, and a semiotic-material node; 2) The Wertheimsteinpark is understood as a sympoietic system, a multispecies meeting space, and a platform for thinking the Chthulucene; and 3) The narratives about the Blood Beech were interlaced in a given space-time because there was a need to give-and-receive sentience about the events that occurred.

Considering all the elements stipulated in the previous paragraphs, and synthetically answering the research question, the elements of Donna Haraway's thinking that are present in the interlacing of the narratives about the logging of the Wertheimsteinpark Blood Beech are: the figure of the cyborg, the notion of companion species, the making of oddkin, significant otherness, relational ontology based on semiotic-material nodes, sympoietic systems, the narrative of the Chthulucene, situated knowledge, SF, cultivation of response-ability, processes of thinking-with, becoming-with and generating-with, the practice of Speakers for the Dead and, finally, the imagination of possible presents and futures.

5.2. Example of Speculative Fabulation from the Blood Beech narratives

By way of closing and highlighting the importance of completing all the dimensions of what it implies to apply a proposal from SF, I present an example of Speculative Fabulation inspired by the narratives about the Blood Beech who lived and died in the Wertheimsteinpark. Haraway (2020i) invites us to write our own SF narratives that allow us to propose possible futures. Consequently, I take on the challenge of formulating an uncertain future from the reflections made in the research diaries – ethnographic and bibliographic. To do so, I am guided by the proposed methodology of SF – especially the example of “The Camille Stories” (Haraway, 2020c) – and apply it to a version of speculative fabulation about the death and mourning process of the successor Blood Beech. That is, the following SF is imagined in approximately 250 more years, in



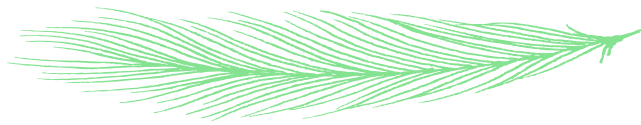
the context of the Wertheimsteinpark, and dialogues with the history of Haraway's Communities of Compost (2020c):

The year was 2275, humans had learned to cope with the blackout that occurred in 2200. Although life expectancy averaged 100 years and there were still humans alive who remembered dystopian experiences prior to the blackout, most humans had been born and raised after the event. According to written sources and the memories evoked by the elders, the blackout had been caused by a set of effects related to global warming and the insufficient responses that previous generations had executed in political, social, economic, and technological terms.

After that event, technologies never worked the same way again. While a group of investors owning transnational conglomerates had a vested interest in returning the technology-capitalism relationship to “normal”, local communities and activist groups had organized. They had managed to reach agreements with the political class, so that, from then on, priority would be given to dealing with the causes and consequences that were producing the ecological catastrophes provoked by the Capitalocene. Learning to survive from the basics was of higher priority than recomposing technologies that had co-elaborated the devastation.

One of the forms of organization that had managed to endure over time was the configuration of Communities of Compost. These communities had been imagined in a fabricated SF by Donna Haraway, Fabrizio Terranova and Vinciane Despret, and then put into practice on the basis of different proposals for art-science models in different parts of the world. Although each community of compost enjoyed autonomy, responded to the partial visions of its members, and to a situated relationship with a specific local territory, they all shared basic guidelines: Restore refuges and protect symbiotic assemblages to ensure multispecies flourishing.

Vienna was no exception; Communities of Compost were also interwoven in the territory. The Wertheimsteinpark area was a protected space for the “Writing Orchids” community. This community not only lived and protected the symbiotic relations of the park, their chosen area for staying with the trouble started at the top of Kahlenberg and extended to the Danube riverbank. The Terran inhabitants of Writing Orchids also cultivated fraternal and cooperative relationships



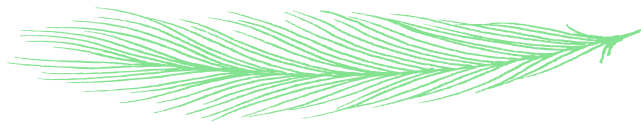
with the other compost communities that adjoined them. On the other side of the Danube, for example, was the community of “Red Flowers of Loretto” and to the south “Lobau Assemblages”.

The Writing Orchids community was committed to the partial healing of its territory. The humans who belonged to it were given an orchid when they learned to read and write, the objective was that they learned to tell Gaia stories, through a becoming and thinking-with this significant otherness. Thus, humans wrote stories on a daily basis, and gathered to share them in the urban forests of their territory. The Wertheimsteinpark was one such space. On the highest slope, right in front of the Döbling Museum, lived a Blood Beech about 250 years old.

The foliage of the tree and the shape of its “elephant roots” were the ideal space for elders, adults, youth, and children to gather around it. Indeed, evenings of reading and reflection on the Stories of Gaia were held there. Yes, it was there that the community created the tree caretakers' brigade, it was there that an educational proposal to support schools in the promotion of multispecies justice was conceived, and it was there that they thought up the weekly seed exchange days for the cultivation of the community's urban gardens. All these initiatives arose from Gaia's stories that were shared.

The Blood Beech was in the remembrances of all those important moments for the community, but it was also in the family and personal memories of each of the people who visited the park. They also knew the importance of the tree and the contribution it made to the ecosystem and the other companion species that lived in it. They knew it because everyday squirrels, birds, insects, and even the visiting pets, enjoyed the daily life with that Blood Beech. However, they also knew that in the last 15 years its foliage was noticeably diminishing. They had counted that its branches no longer had the same strength to resist windstorms. They knew that the time would soon come to say goodbye to it.

Making that decision was difficult, but they were aware that response-ability had to be cultivated and that we are all part of the cycle of living and dying. The Blood Beech was no exception. So, one spring afternoon, after an assembly around it, they had to decide to euthanize it. But “how to say goodbye to an oddkin with these characteristics?”, they thought at that meeting, “and how to accompany death and ensure the continuity of ecological cycles and assemblages?”, they asked

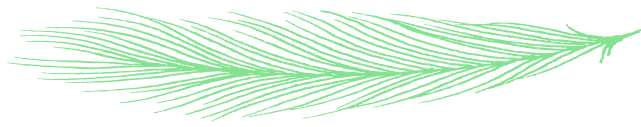


themselves. So, they decided to review Gaia stories and find a joint strategy. That is how they came up with the idea of gradually saying goodbye to the Blood Beech and preparing a successor.

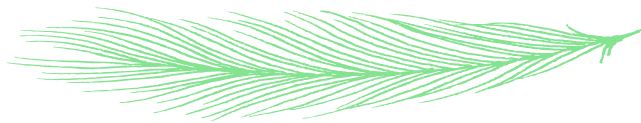
During the last 15 years the tree care brigades had devised ways to reproduce the beloved Blood Beech through propagation systems. From this initiative many seedlings were created. These had to be cared for until they were large enough to be transplanted. Each member of the community who had already received their orchid could commit to care for up to 3 seedlings of the descendants of the Blood Beech. Those who had not yet received their orchid were not left out either, since the kindergartens had as part of their educational program a botanical care module, therefore, they collectively took care of some specimens supported by a learning space. All the seedlings were cared for with respect and love, one of them would be the successor beech, the others could be planted in other parts of the territory.

In the evening of a calm May afternoon, the moment had arrived. The community gathered solemnly and affectionately around the tree, carrying with them all the seedlings descended from the Blood Beech that they had cultivated over the past few years. They waited in silence until a wild animal from the park appeared, they waited for it to approach and physically interact with one of the successor Beeches. "Nature always finds a way to celebrate life again", they said to themselves, when that little animal had chosen the specimen that would take the place of the Blood Beech that was dying today.

That farewell night, the Blood Beech was cut down and its successor planted. The community members were saddened, but among the stories they had reviewed, they had come across a master's thesis that incorporated the stories of the Blood Beech that had preceded the tree they were bidding farewell to today. Their emotions and reflections of the moment empathized with those felt by a "community of friends" of a tree that had died almost 250 years ago. So, paradoxical as it may sound, they wished that the small successor beech tree they had chosen and planted that very night, would also have the opportunity that in 250 years, a community would be able to say goodbye to it. They wished, above all things, that The Communities of Compost would achieve the purpose of the partial healings, and that the symbiotic assemblies of the whole Terrapolis would be regenerated.



Finally, dear reader, I invite you to take up the baton, write Gaia stories, and cultivate responsibility for a new String Figure.



References:

1 - Scientific sources:

Akbulut, Bengi (2015). "A Few Trees" in Gezi Park: Resisting the Spatial Politics of Neoliberalism in Turkey. In: *Urban Forests, Trees, and Greenspace*, ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 227–241. Routledge. <https://doi.org/10.4324/9781315882901>.

Anderson, Benedict (1991[1983]). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London, Verso.

Anzaldúa, Gloria, and AnaLouise Keating (2015). *Light in the Dark : Rewriting Identity, Spirituality, Reality*. Durham London: Duke University Press.

Arendt, H. (1963). *Eichmann in Jerusalem: a report on the banality of evil*. London: Faber and Faber.

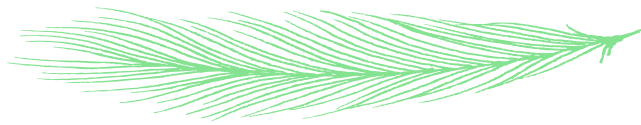
Bachofer, Mark & Mayer, Joachim (2006). *Der neue Kosmos Baumführer. 370 Bäume und Sträucher Mitteleuropas*. Franckh-Kosmos Verlag-GmbH & Co. KG, Stuttgart. ISBN: 978-3-440-11930-6.

Barad, K. (2001). Scientific Literacy → Agential Literacy = (Learning + Doing) Science Responsibly. *Feminist science studies*; ed. by Maralee Mayberry, New York, NY

Barad, Karen (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, N.C.: Duke University Press, 2007.

Barad, Karen (2012). Nature's Queer Performativity. In: *Kvinder, Køn & Forskning* 1-2: 25–53.

Bass, J. O. Joby (2015). The Places of Trees in Honduras: Contributions of Public Spaces and Smallholders. In: *Urban Forests, Trees, and Greenspace*, ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 93–108. Routledge. <https://doi.org/10.4324/9781315882901>.



Bennett, J. (2010). *Vibrant matter: a political ecology of things*. Durham London: Duke University Press.

Billuart, Morgane (2024). *Cycles, the Sacred and the Doomed: Inquiries in Female Health Technologies*. Set Margins' Publications. ISBN 9083350185, 9789833350189.

Bloch, Maurice (1998). Why Trees, too, are good to think with: Towards an Anthropology of the Meaning of Life. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. ed. by Rival, Laura. 39–55. Oxford [et al.]: Berg.

Bonnemère, Pascale (1998). Trees and people: Some vital links. Tree products and other agents in the life cycle of the ankave-anga of Papua New Guinea. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. ed. by Rival, Laura. 113–131. Oxford [et.al.]: Berg.

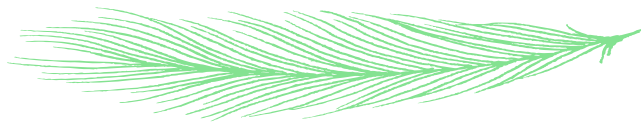
Boyarín, J. (1995). *Remapping memory: The politics of timespace*. Minneapolis, Minn. [et.al.]: University of Minnesota Press.

Braverman, Irus (2015). Order and Disorder in the Urban Forest: A Foucauldian–Latourian Perspective. In: *Urban Forests, Trees, and Greenspace*, ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 132–146. Routledge. <https://doi.org/10.4324/9781315882901>.

Brosse, Jacques (1998). Postface: The Life of trees... Jacques Brosse. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. ed by Rival, Laura. 299–303. Oxford [et.al]: Berg.

Campbell, Lindsay K (2015). Constructing New York City's Urban Forest. The Politics and Governance of the MillionTreesNYC Campaign. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 242–260. Routledge. <https://doi.org/10.4324/9781315882901>.]

Clarke, A., Friese, C., & Washburn, R (2015). *Situational analysis in practice: Mapping research with grounded theory*. Walnut Creek, California: Left Coast Press.



Davis, J., Moulton, A. A., Van Sant, L., & Williams, B. (2019). Anthropocene, Capitalocene, ... Plantationocene?: A Manifesto for Ecological Justice in an Age of Global Crises. In: *Geography Compass*, 13(5), n/a–n/a. doi: 10.1111/gec3.12438

De la Cadena, Marisol (2010). Indigenous Cosmopolitics in the Andes. Conceptual Reflections beyond “Politics”. In: *Cultural Anthropology* 25 (2): 334-370.

Dean, Joanna (2015). The Unruly Tree: Stories from the Archives. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 162-175. Routledge. <https://doi.org/10.4324/9781315882901>.

Descola Philippe (2011). Human Natures. In: *Quaderns* 27, 11-25. ISSN 0211-5557.

Descola, Philippe (2010). Cognition, perception and worlding. In: *Interdisciplinary Science Reviews* 35 (3–4): 334–40.

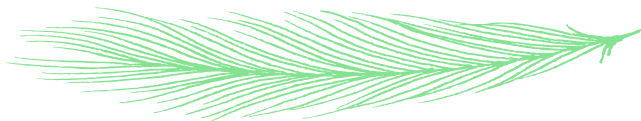
Descola, Philippe (2013). *Beyond nature and culture*. Translated by Janet Lloyd. Chicago: University of Chicago Press.

Descola, Philippe (2014). Modes of being and forms of predication. In: *Hau: Journal of Ethnographic Theory* 4 (1): 271–280.

Duempelmann, Sonja (2019). *Seeing Trees: a History of Street Trees in New York City and Berlin*. New Haven: Yale University Press.

Feltrin, A. N. (2024). Advocating for a Political Vegan Feminism A Rebuttal to Val Plumwood and Donna Haraway’s Criticisms of Ethical Veganism. In: *Relations (Online)*, 11(2), 41–62. doi: 10.7358/RELA-2023-02-FELA

Fernandez, James W (1998). Trees of knowledge of Self and other in culture: on Models for the moral imagination. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival Laura. 81–110. Oxford [et.al.]: Berg.



Flores-Pons, Gemma & Íñiguez-Rueda, Lupicinio & Martínez-Guzmán, Antar (2015). Discurso y materialidad: Pensar las prácticas semiótico-materiales. In: *Alpha*. 201–214. 10.4067/S0718-22012015000100016.

Genat, Bill (2009). Building emergent situated knowledges in participatory action research. In: *Action Research* 2009, 101–115. SAGE Publications. Republished in *Situational Analysis in Practice*, by Adele E. Clarke, Carrie Friese, and Rachel Washburn, 155–170 (Taylor & Francis, 2015).

Giambelli, Rodolfo. A (1998). The Coconut, the Body and the Human Being. Metaphors of life and Growth in Nusa Penida and Bali. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival, Laura. 133–158. Oxford [et.al.]: Berg.

Greenhough, B. (2019). The promises and pitfalls of specifying situatedness. In: *Dialogues in Human Geography*, 9(2), 162–165. doi: 10.1177/2043820619850271

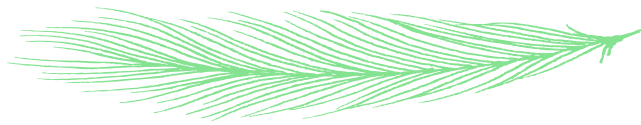
Gulsrud, Natalie Marie and Ooi, Can-Seng (2015). Manufacturing Green Consensus: Urban Greenspace Governance in Singapore. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 77–92. Routledge <https://doi.org/10.4324/9781315882901>.

Haberman, David L. (2010). Faces in the Trees. In: *Journal for the Study of Religion, Nature and Culture* 4.2: 173–90.

Hammond, Cynthia Imogen (2015). The Thin End of the Green Wedge: Berlin's Planned and Unplanned Urban Landscapes. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 207–224. Routledge. <https://doi.org/10.4324/9781315882901>.

Hararay, Donna (2016b). Manifiesto Chthuluceno desde Santa Cruz. *Laboratory Plant*, núm. 5.

Haraway, Donna (1988). Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. In: *Feminist Studies* 14 (3): 575–599.



Haraway, Donna (1998a). 'Gender' for a Marxist Dictionary: The sexual politics of a word. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 127–148. Print. London: Free Assoc. Books.

Haraway, Donna (1998b). Animal Sociology and a Natural Economy of the Body Politic: A political Physiology of Dominance. In: *Simians, Cyborgs, and Women : the Reinvention of Nature*. 4. 7–20. Print. London: Free Assoc. Books.

Haraway, Donna (1998c). In the beginning was the world: the genesis of biological. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 71–80. Print. London: Free Assoc. Books.

Haraway, Donna (1998d). Introduction. In *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 1–6. Print. London: Free Assoc. Books.

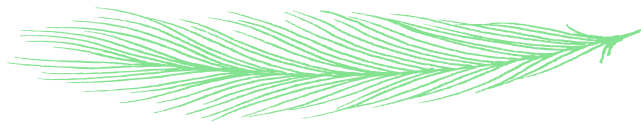
Haraway, Donna (1998f). The Biological Enterprise: Sex, Mind, and Profit from Human Engineering to Sociobiology. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 43–68. Print. London: Free Assoc. Books.

Haraway, Donna (1998g). The Biopolitics of Postmodern Bodies: Constitutions of self in Immune System Discourse. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 203–230. Print. London: Free Assoc. Books.

Haraway, Donna (1998h). The Contest for Primate Nature: Daughters of Man-the-Hunter in the Field, 1960–1980. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 81–108. Print. London: Free Assoc. Books.

Haraway, Donna (1998i). The Past is the Contested Zone: Human Nature and Theories of Production and Reproduction in Primate Behaviour Studies. In: *Simians, Cyborgs, and Women: the Reinvention of Nature*. 4. 21–42. Print. London: Free Assoc. Books.

Haraway, Donna (2004a). Cyborgs to Companion Species: Reconfiguring Kinship in Technoscience. In: *The Haraway Reader*. 295–320. New York, NY [et.al.]: Routledge.



Haraway, Donna (2004b). Otherwordly Conversations; Terran Topics; Local Terms. In: *The Haraway Reader*. 125–150. New York, NY [et.al.]: Routledge.

Haraway, Donna (2004c). A manifesto for Cyborgs: Science, Technology, and Social Feminism in 1980s. In: *The Haraway Reader*. 7–62. New York, NY [et.al.]: Routledge.

Haraway, Donna (2004f). Introduction. A Kinship of feminist Figuration. In: *The Haraway Reader*. 1–6. New York, NY [et.al.]: Routledge.

Haraway, Donna (2004g). Morphing in the Order: Flexibler Strategies, Feminist Sciences Studies, and Primate Revisions. In: *The Haraway Reader*. 199–222. New York, NY [et.al.]: Routledge.

Haraway, Donna (2004h). Race: Universal Donors in a Vampire Culture. It's All in the Family: Biological Kinship Categories in the Twentieth-Century United States. In: *The Haraway Reader*. 251–294. New York, NY [et.al.]: Routledge.

Haraway, Donna (2004i). The Promises of Monsters: A Regenerative Politics for Inappropriated/d Other. In: *The Haraway Reader*. 63–124. New York, NY [et.al.]: Routledge.

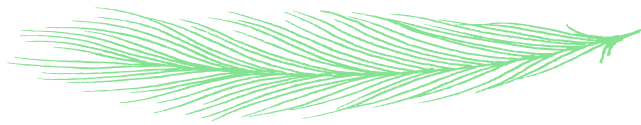
Haraway, Donna (2004k). *Testigo_Modesto@Segundo_Milenio.HombreHembra@_Conoce_Oncoratón®. Feminismo y tecnociencia*. Editorial UOC. ISBN: 9788497881715

Haraway, Donna (2008a). Able bodies and companion species. In: *When Species Meet*. 161–179. Minneapolis London: University of Minnesota Press.

Haraway, Donna (2008c). Parting Bites. Nourishing Indigestion. In: *When Species Meet*. 285–301. Minneapolis London: University of Minnesota Press.

Haraway, Donna (2008d). Training in the contact zone. Power, Play, and Invention in the Sport of Agility. In: *When Species Meet*. 205–246. Minneapolis London: University of Minnesota Press.

Haraway, Donna (2008e). Value-added dogs and lively capital. In: *When Species Meet*. 45–68. Minneapolis London: University of Minnesota Press.



Haraway, Donna (2008f). When Species Meet: Introductions. In: *When Species Meet*. 3–44. Minneapolis London: University of Minnesota Press.

Haraway, Donna (2015). *El patriarcado del osito Teddy. Taxidermia en el Jardín del Edén. sans soleil ediciones*. Barcelona, España. ISBN: 978-987-3923-005.

Haraway, Donna (2016). *Staying with the Trouble*. Experimental Futures. Durham, NC: Duke University Press.

Haraway, Donna (2017a). Naturoculturas emergentes. In: *Manifiesto de las especies de compañía: Perros, gentes y otredad significativa*. 1–24. Bocavulvaria Ediciones.

Haraway, Donna (2017c). Relatos de entrenamiento. In: *Manifiesto de las especies de compañía: Perros, gentes y otredad significativa*. 41–62. Bocavulvaria Ediciones.

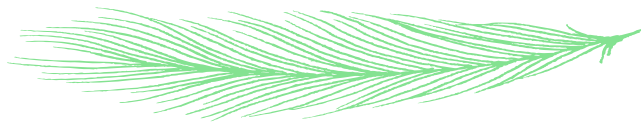
Haraway, Donna (2017d). Relatos de evolución. In: *Manifiesto de las especies de compañía: Perros, gentes y otredad significativa*. 25–32. Bocavulvaria Ediciones.

Haraway, Donna (2017e). Relatos de raza. In: *Manifiesto de las especies de compañía: Perros, gentes y otredad significativa*. 63–101. Bocavulvaria Ediciones.

Haraway, Donna (2018b). A family reunion. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed. by Haraway, Donna, and Thyrza Nichols Goodeve 119–121. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2018c). Facts, witnesses, and consequences. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed. by Haraway, Donna, and Thyrza Nichols Goodeve. 267–271. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2018d). Femaleman ©_Meets_oncomouse™. Mice into Wormholes: A technoscience Fugue in two Parts. In: *Modest_witness@second_millennium*.



Femaleman_meets_oncomouse: Feminism and Technoscience. Second edition. Ed. by Haraway, Donna, and Thyrza Nichols Goodeve. 49–118. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2018e). Fetus: The Virtual Speculum in the New World Order. In: Goodeve. *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed by Haraway, Donna, and Thyrza Nichols. 173–212. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

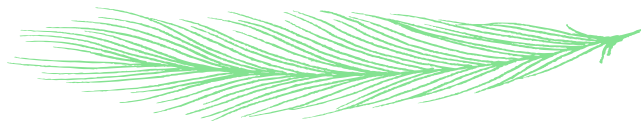
Haraway, Donna (2018f). Gene: Maps and Portraits of Life Itself. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed by Haraway, Donna, and Thyrza Nichols. 131–172. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2018g). Modest_Witness@second_Millennium. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed by Haraway, Donna, and Thyrza Nichols. 23–45. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2018h). Race: Universal Donors in a Vampire Culture: It's all in the family. Biological Kinship Categories in the Twentieth-Century Unites States. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and Technoscience*. Second edition. Ed by Haraway, Donna, and Thyrza Nichols. 213–265. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna (2020). *Seguir con el problema: generar parentesco en el Chthuluceno*. Bilbao: Consonni.

Haraway, Donna (2020a). Una práctica curiosa. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 195–206. Bilbao: Consonni.



Haraway, Donna (2020b). Generar parentesco. Antropoceno, Capitaloceno, Plantacionoceno, Chthuluceno. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 153–159. Bilbao: Consonni.

Haraway, Donna (2020c). Historias de Camille. Niñas y niños del compost. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 207–251. Bilbao: Consonni.

Haraway, Donna (2020d). Introducción. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 19–30. Bilbao: Consonni.

Haraway, Donna (2020e). Inundada de orina. DES y Premarin en respons-habilidad multiespecies. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 161–179. Bilbao: Consonni.

Haraway, Donna (2020f). Jugando a figuras de cuerdas con especies compañeras. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 31–58. Bilbao: Consonni.

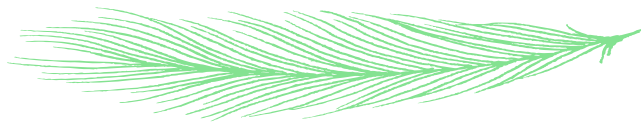
Haraway, Donna (2020g). Pensamiento tentacular. Antropoceno, Capitaloceno, Chthuluceno. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 59–98. Bilbao: Consonni.

Haraway, Donna (2020h). Sembrar mundos. Una bolsa de semillas para terraformar con alteridades terráqueas. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 181–194. Bilbao: Consonni.

Haraway, Donna (2020i). Simbiogénesis y las artes de seguir con el problema. In: *Seguir con el problema: generar parentesco en el Chthuluceno*. 99–152. Bilbao: Consonni.

Haraway, Donna (2023). *Mujeres, simios y ciborgs. La reinención de la naturaleza*. Alianza editorial. ISBN 978-84-1148-313-1.

Haraway, Donna, and Thyrza Nichols Goodeve (2018a). Nothing Comes Without its World. Hanna J. Haraway in conversation with Thyrza Nichols Goodeve, 20th Anniversary of *Modest_Witness*. In: *Modest_witness@second_millennium. Femaleman_meets_oncomouse: Feminism and*



Technoscience. Second edition. Xiii–Xlvii. Boca Raton, FL: Routledge, an imprint of Taylor and Francis.

Haraway, Donna. (2004d). Cyborg, Coyotes, and Dogs: Kinship of Feminist Figurations and There Are Always More Things Going on Than You Thought! Methodologies as Thinking Technologies. An interview with Donna Haraway. In *The Haraway Reader*. 321–342. New York, NY [et.al.]: Routledge.

Harvey, Graham (2003). *Shamanism: a Reader*. 1. publ. London [et.al.]: Routledge.

Harvey, Graham (2005). *Animism : Respecting the Living World*. London: Hurst.

Harvey, Graham (2013). *The handbook of contemporary animism* (1. publ.). Durham: Acumen.

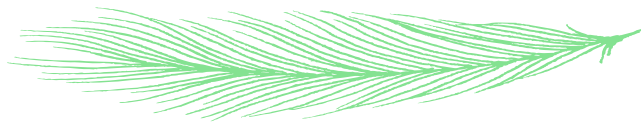
Hell, Bodo. (2023). *Begabte Bäume* Droschl. Mit 23 Zeichnungen von Linda Wolfsgruber. Graz: Literaturverlag Droschl, ISBN 9783990591307.

Hohti, R., & Tammi, T. (2019). The greenhouse effect: Multispecies childhood and non-innocent relations of care. *Childhood* (Copenhagen, Denmark), 26(2), 169–185. doi: 10.1177/0907568219826263

Howell, Signe (1998). ‘May Blessings Come, May Mischiefs Go!’ Living Kinds as Agents of Transitions and Transformation in an Eastern Indonesian Setting. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival, Laura. 159–175. Oxford [et.al.]: Berg.

Hudson, Blake (2015). Institutions, Law, and the Political Ecology of Urban Forests: A Comparative Approach. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 61–76. Routledge. <https://doi.org/10.4324/9781315882901>.

Ingold, Tim (2004). Beyond Biology and Culture. The Meaning of Evolution in a Relational World. In: *Social Anthropology*, 12(2), 209-221.



Ingold, Tim (2008). Bindings against Boundaries: Entanglements of Life in an Open World. In: *Environment and planning. A*, 40(8), 1796–1810. Available at: <https://doi.org/10.1068/a40156>.

Ingold, Tim (2011). *Being Alive: Essays on Movement, Knowledge and Description*, London: Routledge.

Ingold, Tim (2000). *The perception of the Environment: Essays on Livelihood, Dwelling and Skill*. London: Routledge.

Ingold, Tim (2021). Preface to the 2021 reissue. In: *The Perception of the Environment*. United Kingdom: Taylor & Francis Group.

Irni, Kuura (2023). Staying with the Trouble in Cat Advocacy: Donna Haraway, Vegan Politics, and the Case of Cat Food. In: *Feminist Animal and Multispecies Studies: Critical Perspectives on Food and Eating (Vol. 6)*. United States: BRILL.

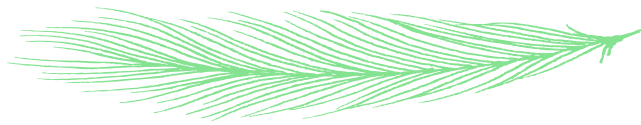
Jones, Owain (2015). (Urban) Places of Trees: Affective Embodiment, Politics, Identity, and Materiality. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 111–131. Routledge. <https://doi.org/10.4324/9781315882901>.

Kamsteeg, F., Durrani, L., & Wels, H. (2021). Organizational ethnography after lockdown: “walking with the trouble”. In: *Journal of Organizational Ethnography*, 10(3), 358–368. doi: 10.1108/JOE-10-2021-087.

King, Katie (2015). Attaching, for Climate Change: A Symptoiesis of Media. Book proposal.

Knight, John (1998). The second life of trees: Family Forestry in Upland Japan. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival, Laura. 197–218. Oxford [et.al.]: Berg.

Kohn, Eduardo (2013). *How Forests Think: Toward an Anthropology Beyond the Human*. 1st ed. Berkeley: University of California Press.



Kohn, Eduardo (2014). What an Ontological Anthropology Might Mean. Fieldsights. In: *Theorizing the Contemporary. Cultural Anthropology Online*, January 13, 2014, <http://www.culanth.org/fieldsights/463-what-an-ontological-anthropology-might-mean>.

[Available at 19.10.2015]

Kohn, Eduardo (2015). Anthropology of Ontologies. In: *Annu. Rev. Anthropol* 44: 311–327. DOI 10.1146/annurev-anthro-102214-014127.

Kohn, Eduardo (2022). Forest Forms and Ethical Life. In: *Environmental humanities*, 14(2), 401–418. Available at: <https://doi.org/10.1215/22011919-9712478>.

Konijnendijk van den Bosch, Cecil C (2015). From Government to Governance: Contribution to the Political Ecology of Urban Forestry. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 35–46. Routledge. <https://doi.org/10.4324/9781315882901>.

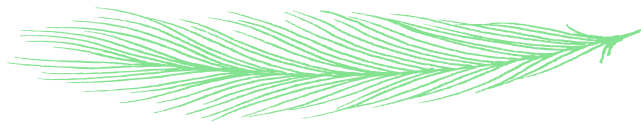
Konijnendijk van den Bosch, Cecil C. (2016). Tree Agency and Urban Forest Governance. In: *Smart and Sustainable Built Environment* 5, no. 2. 176–88. <https://doi.org/10.1108/SASBE-07-2015-0017>.

Latour, B. (2014). Agency at the Time of the Anthropocene. In: *New literary history*, 45(1), 1–18. Available at: <https://doi.org/10.1353/nlh.2014.0003>.

Latour, Bruno (1993). *We Have Never Been Modern*. 1. publ. New York, NY [et.al.]: Harvester Wheatsheaf.

Latour, Bruno (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory* Oxford: Oxford University Press.

Latour, Bruno (2007). On the Difficulty of Being an ATN. In: *Reassembling the social: An introduction to actor-network-theory*. 141–156. Oup Oxford.



Latour, Bruno (2013). *An Inquiry into Modes of Existence: an Anthropology of the Moderns*. Cambridge, Mass. [et.al.]: Harvard Univ. Pr.

Lundblad, M. (2022). How to Live Together with Rats. In: *Tamkang Review*, 52(2), 101–116. doi: 10.6184/TKR.202206_52(2).0005

Mauzé, Marie (1998). Northwest Coast Trees: From Metaphors in Culture to Symbols for Culture. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival, Laura. 233–251. Oxford [et.al.]: Berg, 1998.

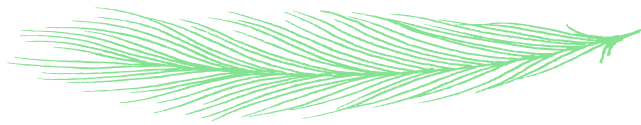
Molloy Murphy, A. (2018). (Re)considering Squirrel—From Object of Rescue to Multispecies Kin. In: *Journal of Childhood Studies (Prospect Bay)*, 43(1), 60–67. doi: 10.18357/jcs.v43i1.18265

Norkunas, Martha (2017). Are Trees Spiritual? Do Trees Have Souls? Narratives About Human–Tree Relationships. In: *Narrative Culture* 4, no. 2: 169–84. <https://doi.org/10.13110/narrcult.4.2.0169>.

Palomino, Salvador (1993). Die drei Räume und Zeiten in Quechua-Kosmos. (Quechua/Peru). In: *Stimmen der Erde: Ureinwohner über Umwelt und Entwicklung*. 1. Ed. by Big-Mountain-Aktionsgruppe, and Aktionsgruppe Indianer & Menschenrechte. 73–88. Aufl. München: Raben-Verl.

Patrick, Darren (2015). Queering the Urban Forest: Invasions, Mutualisms, and Eco-Political Creativity with the Tree of Heaven (*Ailanthus altissima*). In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 191–206. Routledge. <https://doi.org/10.4324/9781315882901>.

Paulzen, Herbert (1993). Das Salzwasser-Volk. Von Nathan Wate (Lau/Solomon-Inseln) erzählt für Herbert Paulzen. In: *Stimmen der Erde: Ureinwohner über Umwelt und Entwicklung*. 1. Ed. by Big-Mountain-Aktionsgruppe, and Aktionsgruppe Indianer & Menschenrechte. 101–110. Aufl. München: Raben-Verl.



Perkins, Harold (2015). Urban Forests are Social Natures: Markets, Race, Class, and Gender in Relation to (Un)Just Urban Environments. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 19–34. Routledge. <https://doi.org/10.4324/9781315882901>.

Queme Chay, Rigoberto (1993). Die Maismenschen haben ihre alten Götter nicht vergessen. (Maya/Guatemala). In: *Stimmen der Erde: Ureinwohner über Umwelt und Entwicklung*. 1. Ed. by Big-Mountain-Aktionsgruppe, and Aktionsgruppe Indianer & Menschenrechte. 25–57. Aufl. München: Raben-Verl.

Rival, Laura (1998). *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Oxford [et.al.]: Berg.

Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt (2015). *Urban Forests, Trees, and Greenspace*. Routledge. <https://doi.org/10.4324/9781315882901>.

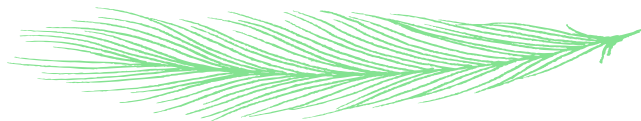
Shani, Liron (2017). Of Trees and People: The Changing Entanglement in the Israeli Desert. In: *Ethnos* 83, no. 4: 624–44. <https://doi.org/10.1080/00141844.2017.1304972>.

Sivaramakrishnan, Krishna (1998). Modern Forestry: Trees and Development Spaces in South-west Bengal, India. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. Ed. by Rival, Laura. 273–296. publ. Oxford [et.al.]: Berg.

Smartt Gullion, Jessica (2018). *Diffraction Ethnography*. Social Sciences and the Ontological Turn. New York and London: Routledge.

Stöckelová, T., Senft, L., & Kolářová, K. (2023). Sympoietic growth: living and producing with fungi in times of ecological distress. In: *Agriculture and Human Values*, 40(1), 359–371. doi: 10.1007/s10460-022-10366-7

Streule, M. (2020). Doing mobile ethnography: Grounded, situated and comparative. In: *Urban Studies*, 57(2), 421–438. <https://doi.org/10.1177/0042098018817418>



Timeto, F. (2021). Becoming-with in a compost society — Haraway beyond posthumanism. In: *International Journal of Sociology and Social Policy*, 41(3/4), 315–330. doi: 10.1108/IJSSP-08-2019-0158.

Tsing, A. (2012). Unruly Edges: Mushrooms as Companion Species. In: *Environmental Humanities*, 1(1), 141–154. doi: 10.1215/22011919-3610012

Tsing, A. L. (2015a). *The mushroom at the end of the world: on the possibility of life in capitalist ruins*. Princeton Oxford: Princeton University Press.

Tsing, A.L. (2015b) Feral biologies. In: *Inaugural conference: Anthropological visions of sustainable futures*. Organised by Brightman, M and J. Lewis. London: Centre for the Anthropology of Sustainability (CAOS), University College London. February 13, 2015.

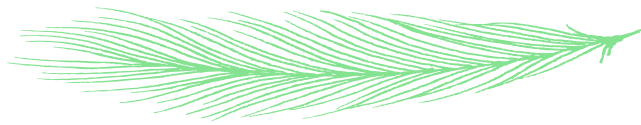
Tsing, A. L., Swanson, H. A., Gan, E., & Bubandt, N. (2017). *Arts of living on a damaged planet*. Minneapolis London: University of Minnesota Press.

Torres, H. (2019a). Bastardas de Camille. Fabulación y feminismo especulativo de la mano de Donna Haraway. In: *Ecología política: cuadernos de debate internacional*, (57), 98–103.

Torres, H. (2023). Prólogo. In: *Mujeres, Simios y cíborgs. La reinención de la Naturaleza*. Ed. by Donna Haraway. Alianza Editorial 11–15.

Uchiyamada, Tasushi (1998). “The Grove is our Temple”. Contested Representations of Kaavu in Kerala, South India. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival Laura. 177–196. Oxford [et.al.]: Berg.

Van Herzele, Ann (2015). A Genealogy of Urban Forest Discourse in Flanders. In: *Urban Forests, Trees, and Greenspace*. Ed. by Sandberg, L. Anders, Adrina Bardekjian, and Sadia Butt. 47–60. Routledge. <https://doi.org/10.4324/9781315882901>.



Viveiros de Castro, Eduardo (2012). Immanence and fear: Stranger-events and subjects in Amazonia. In: *HAU journal of ethnographic theory*, 2(1), 27–43. Available at: <https://doi.org/10.14318/hau2.1.003>.

Viveiros de Castro, Eduardo (2015). Who is Afraid of the Ontological Wolf? Some Comments on an Ongoing Anthropological Debate. In: *The Cambridge Journal of Anthropology* 33 (1):2–17.

Viveros de Castro, Eduardo (1998). Cosmological deixis and Amerindian perspectivism. In: *The Journal of the Royal Anthropological Institute* 43(3): 469–488.

Woelm, Elmar (2006). *Mythologie, Bedeutung und Wesen unserer Bäume*. Verlagshaus Monsenstein u. Vannerdat.

Zaragocin, Sofia, & Caretta, Martina Angela (2021). Cuerpo-Territorio: A Decolonial Feminist Geographical Method for the Study of Embodiment. In: *Annals of the American Association of Geographers*, 111(5), 1503–1518.

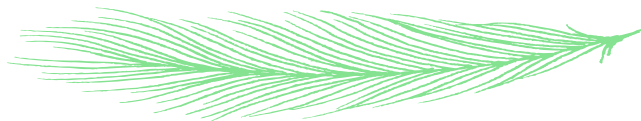
Zelter, Angie (1998). Grassroots Campaigning for the World's Forests. In: *The Social Life of Trees: Anthropological Perspectives on Tree Symbolism*. 1. publ. Ed. by Rival, Laura. 221–232. Oxford [et.al.]: Berg.

2 - Documents, web sites, films, and others:

Ch. Tomiczek (n. d.). [Kann die Kaiserbuche am Haunsberg noch gerettet werden?](http://bfw.ac.at/inst4/integrierter-fs/kaiserbuche/kb01.html), <http://bfw.ac.at/inst4/integrierter-fs/kaiserbuche/kb01.html>, [Available in January 2024].

Goldberg, E., & Gabriel, M. (1995). *Pocahontas*. Buena Vista Pictures.

Land Salzburg (2004). [Naturdenkmal Kaiserbuche nicht zu retten](https://service.salzburg.gv.at/lkorri/Index?cmd=detail_ind&nachrid=32829), Salzburger Landeskorespondenz vom 13. August 2004 https://service.salzburg.gv.at/lkorri/Index?cmd=detail_ind&nachrid=32829, [Available in January 2024].



Land Salzburg (2005). Rotbuche auf GN 1466 KG Schönstraß, gepflanzt 2005; Ausweisung zum Naturdenkmal - Zahl 30303/253-4102/8-2005.

<https://web.archive.org/web/20150626193234/http://www.salzburg.gv.at/2534102-8.pdf>,

[Available in January 2024].

Land Salzburg. (n. d.). “Neue Kaiserbuche”.

<https://service.salzburg.gv.at/ins/external/displayRegion?id=487>, [Available in January 2024].

Naturschutzfachdienst des Amtes der Salzburger Landesregierung. (2004). *Das Ende der Kaiserbuche*. Heft 3. 2004.

<https://web.archive.org/web/20051026153811/http://www.salzburg.gv.at/aktuelles-3-04.pdf>,

[Available in January 2024].

OpenTree (n. d.). OpenTree.org [Available in April 2021]

Stadt Wien, (2021). *Wertheimsteinpark*

<https://www.wien.gv.at/umwelt/parks/anlagen/wertheim.html> [Available in September 2021]

Stadt Wien, (no

date). https://www.wien.gv.at/umweltgut/public/grafik.aspx?ThemePage=11&fbclid=IwAR3BIVv_cQk9WEYAxD0roopU6JpASzPdZ_8WIHYh5F-F270YwpGWH_YpiLY [Available in April 2021]

Torres, H. (2011) Fukushima desde las ventanas del Manifiesto Cyborg. Diagonal.

<https://www.diagonalperiodico.net/culturas/fukushima-desde-ventanas-del-manifiesto-cyborg.html> [Available in June 2024]

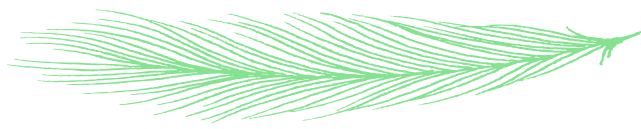
Torres, H. (2019b). Compost de pensamiento. Periódico Página 12.

<https://www.pagina12.com.ar/224363-compost-de-pensamiento> [Available in June 2024]

Torres, H. (no date). Helen(a)torres <https://helenatorres.wordpress.com/> [Available in June 2024]

3 - Material generated in the research process:

[Cornejo-Torres, R] (2022). Coding of quotes from the field diary.



[Cornejo-Torres, R] (2021). Ethnographic field diary.

[Cornejo-Torres, R] (2023-2024). Research diary.

[Cornejo-Torres, R] (2021). Situational map 1: Structuration of ethnographic data.

[Cornejo-Torres, R] (2023). Situational map 2: Conceptual field of Donna Haraway's perspective/main concepts.

[Cornejo-Torres, R] (2024). Situational map 3: Links between Haraway's thinking and ethnographic data in the frame of Staying with the trouble.