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The Body and Post-Extractivism

An exploration of the role of embodiment in the development of
post-extractivist imaginaries

Master's Thesis

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Abstract

The global economy depends substantially on the material resources extracted from the environment. Extractivism is a process of intensive extraction of natural resources, which are used as energy sources or materials for producing goods that tend to exceed the capacity of the environment to regenerate itself. Recently, the concept expanded to mean a mentality that enables the exploitation and exhaustion of the other-than-human. As a response to a growing concern with the scale and unsustainability of extractivism, a new concept has been developed: post-extractivism. Post-extractivism assumes as little extraction of natural resources as possible and the lowest possible impact of human society on the other-than-human.

In this exploratory study situated in the Western context, I combined art and science to investigate how artistic embodiment practices can facilitate the development of post-extractivist imaginaries, which assume a non-exploitative, reciprocal and regenerative relationship with the other-than-human. To expand the societal and practical contributions of my research, I conducted interviews with artists and embodiment practitioners, participated in and/or conducted desk research of their practices, and developed an embodiment workshop for people from my local environment.

My main results indicated that artistic embodiment engaging with dialogue and attunement, through intimacy, touch and embodiment of the other-than-human has the potential to enable post-extractivist imaginaries. In the view of the artists I interviewed and workshop participants, the recognition of the interconnectedness between the human and the other-than-human and stepping beyond human-centredness can support a shift towards post-extractivism.

My research laid the foundations for further exploration of the concept of post-/extractivist imaginaries as well as of embodiment as a methodology to learn and practice reciprocal, regenerative and non-exploitative ways of interaction with other-than-human beings. It contributed with some examples of how six artists, based in the West and recognising the other-than-human in their artistic practices, are researching and practising post-extractivist ways of being.

Keywords: extractivism, post-extractivism, embodiment, imaginaries, other-than-human

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Introduction

1.1 Background

The global economy depends substantially on the material resources extracted from the environment (Wiedmann et al., 2015, p. 6272). Yet, the sustainability of our resource use has been questioned (ibid.). The material footprint (the total amount of raw materials extracted to meet the final consumption demand of a particular economy) of 186 countries, including the largest economies such as the US or China, in 2008, reached the highest ever value of a total of 70 billion tonnes (ibid., p. 6274). The current trends of material extraction exceed the capacity of the natural environment to regenerate itself leading to, among others, biodiversity loss, soil erosion and water depletion (ibid., p. 6271).

The mentioned extraction is often referred to as *extractivism*. Extractivism is a process of extraction of natural resources, such as coal, oil, minerals and biomass as well as land, which are used as energy sources or materials for producing goods, often preceded by export (Schaffartzik & Pichler, 2017, p. 38; Durante, Kröger, & LaFleur, 2021, p. 20). Extracting resources is not necessarily unsustainable in itself. Regenerative agriculture practices extract land and its produce. At the same time, regenerative farming improves the health of the local ecosystem and increases biodiversity (Newton et al., 2020, p. 5).

Some scholars argued, however, that extractivism often means an intensive extraction that tends to exceed the capacity of the environment to regenerate itself (Chavez, 2013, p. 25; Acosta, 2013, p. 81-82; Souza-Filho et al., 2021, p. 1707). Ye et al. (2020, p. 155) describe extractivism as control over certain resources and their “ruthless exploitation”. The authors underlined that extractivism of natural resources is inherently unsustainable - it is “a production without reproduction” (ibid., p. 157). Extractivist practices tend to exploit the wealth of natural resources until they are exhausted and leave behind barren environments unable to recover themselves and support life forms that inhabited them before the extraction (ibid.).

As an example, the current practices of extracting gravel and sand can be described as intensive extraction. It is estimated that up to 40 billion tonnes of gravel and sand are extracted every year from riverbeds, coastal areas as well as in-land areas such as forest grounds, to be used mostly in the construction industry (Bhatawdekar et al., 2021, p. 144; U.S. Geological Survey, n.d.). The extraction of sand and gravel, both illegal and legal, destroys the habitat of different species, changes the landscape and integrity of the coastlines, deteriorates water quality and causes dust pollution (Filho et al., 2021, p. 10). Currently, the extraction proceeds at a rate that cannot be balanced by the natural sand replenishment and turns these negative consequences into long-lasting problems.

1.2 Previous research

When reviewing the academic literature on extractivism, I observed that the concept of extractivism evolved from being understood only as a process of natural resource extraction to also encompassing a mentality that enables extractivist ways of treating the other-than-human.

Several academic papers use the term extractivism to describe an activity, i.e. a process of removal of natural resources from the environment through mining with hardly any on-site processing of the extracted goods (Ye et al., 2020, p. 156; Nygren, Kröger & Gills, 2022, p. 735).

Many studies expand the concept and use the word extractivism to describe practices, but also the mindset, politics and economic models accompanying resource exploitation (Nygren, Kröger & Gills, 2022, p. 735). Chavez (2013, p. 23) and Ye et al. (2020, p. 155) discuss extractivism as a politico-economic model, that assumes the trade of extracted resources, which can bring significant financial revenues and contribute to the economic development of the extracting economy. Acosta (2013, p. 62), defines it as a mode of accumulation of wealth linked to the capitalist economic system of today, which began to be shaped by the colonisation of the Americas, Africa and Asia by the Europeans (ibid.). Some argue that colonial extractivism continues today with the extractivist projects located primarily in the Global South, considered necessary for the production of goods and energy worldwide (Firpo de Souza Porto, Rocha & Oswaldo Cruz -Rio de Janeiro, 2022, p. 488). In 2015, almost five times more raw materials were drained or appropriated by Global North from the Global South (Hickel et al., 2022, p. 3).

Recently, scholars began to talk about extractivism as a 'narrative' or 'mentality' of 'Western reason' (Chavez, 2013, p. 13). Nygren, Kröger & Gills (2022, p. 735) describe it as a narrative of appropriation and commodification of nature. In the words of Anna Willow (2018, p. 5): "Extractivism begins with the mindset of exploitation, and so with the language and the words we use to justify it. Calling coal, soils, fish, timber, and minerals "natural resources" implies the right and even duty to extract.". Durante, Kröger, & LaFleur (2021, p. 20) define extractivism explicitly as "*a particular way of thinking and the properties and practices organized towards the goal of maximizing benefit through extraction, which brings in its wake violence and destruction.*"

Some argue that the extractivist mentality can penetrate the global economy, and political agendas with the above-mentioned extractivist projects of gravel and sand extraction, as well as individual ways of thinking, desires and fears (Junka-Aikio & Cortes-Severino, 2017, p. 182). For example, Bösel (2022, p. 1) explored the concept of affective extractivism

explained as “an industrial extractivist system that is providing pleasure for the privileged [people] while exploiting the less privileged and damaging the ecosystem”.

In this research, I adopt the understanding of extractivism which comprises both the activity of intensive exploitation of other-than-human beings as well as extractivism as a mindset which motivates the exploitation and exhaustion of the other-than-human beings for one’s benefit (Kouritzin & Nakagawa, 2018, p. 678; Padios, 2017, p. 214). In this thesis, I will refer to this understanding of extractivism as extractivist imaginaries, defining imaginaries as the way people understand the world around them manifested through their beliefs and actions (Taylor, 2007, as cited in Beaman & Stacey, 2021, p. 4; see 2.2 Extractivist and post-extractivist imaginaries for elaboration).

As a response to a growing concern with the scale and unsustainability of extractivism, a new concept has been developed: post-extractivism. Post-extractivism proposes socio-economic and developmental models with the lowest possible environmental impact, as little extraction of natural resources as possible and “the harmonious subsistence of the human race within nature” (Acosta, 2017, p. 15; Gudynas, 2013, p. 165). Post-extractivism is often presented as a socio-political transition, going hand-in-hand with the post-colonial transformation. It supports the reclamation of the land and natural resources by local communities from the control of international mining companies often driven by the interest of the countries of Global North (Nygren, Kröger & Gills, 2022, p. 751; Hickel et al., 2022, p. 5). Further, Acosta (2013, p. 80) argues that to lift the pressure of extraction and enable post-extractivism in the Global South, the Global North would need to at least stabilise if not reduce its material and energy throughput.

Besides economic and political change, Nygren, Kröger & Gills (2022, p. 751) recognised a necessity for a transition to *socionatures*, which understand the entanglement of human and the other-than-human life and how they are impacted by extractivism. Svampa (2019, p. 44) wrote about the need for “holistic relational visions” of life that recognise extractivist exploitation as a violation of the relationship between the human and the other-than-human. Research on post-extractivism in Latin America suggests that indigenous cosmologies and worldviews, such as *buen vivir* or *sumak kawsay*, can help people imagine and understand the collectivity of all the life on the planet, necessary to enact post-extractivism (Acosta, 2013, p. 81-82; Svampa, 2019, p. 44).

In this thesis, I aim to build on the above-described previous research by investigating ways to contribute to developing post-extractivist imaginaries, as a response to the earlier-mentioned extractivist imaginaries. I situate my research in the context of Western Europe, where I am based.

The literature suggests that extractive narratives are associated with the disconnection between people and the surrounding world and they are often linked to Western culture where they are understood to be endemic (Escobar, 2015, p. 15; Kimmerer, 2013, p. 38-40; Martínková, 2017, p. 102). Yet, it is crucial to recognise that while the premise of the nature-culture dichotomy in the West is supported by academic research findings, it is also problematically reductive (Stacey, 2021, p. 88; Rose, 2017, p. 495). This premise has been problematised in the scientific literature, as it tends to describe Western culture as uniform, may not recognise the variety and complexity of approaches present within it, and obscures resources for socio-ecological transformation developed in the West (Castree, 2003, p. 203; Stacey, 2021, p. 88). Furthermore, scholars address the problem, dualistic in itself, of dividing the culture between the dualistic West and the rest of the world (Mehtta, 2022, p. 584). The cultures that are not considered Western, are understood to recognise the interconnectedness of nature and culture manifested in for example animism (ibid.). The West and non-West dualism tends to romanticise non-Western cultures, ignoring their nuances and complexity and posing a risk of its appropriation (Rose, 2017, p. 502; Mehtta, 2022, p. 585). Thus, it is vital to acknowledge the nuance and open space for the recognition and exploration of the multitude of perspectives in Western culture. In this thesis, I will present some practices and ideas of how dualism and extractivism are reproduced and surpassed in the West.

In this research, I explored artistic embodiment as an approach to developing post-extractivist imaginaries. The research has shown that art can be a tool for environmental, social and political transformation (Milbrandt, 2010, p. 8, 10-11; Hawkins & Kanngieser, 2017, p. 5-7). Celermajer et al. (2020, p. 492) argued that art facilitates “other ways of knowing” and invites intimacy between beings that does not require a mastery of one over the other. Research has been done that connects artistic embodiment and sustainability. Embodiment encompasses a wide variety of activities, which involve an active engagement with the body and senses (Hunter & Emerald, 2016, p. 30-32). The study by Lehtonen, Österlind, & Viirret (2020) described drama workshops on climate change. They concluded that embodied drama exercises increased the feeling of interconnectedness, broadened perspectives of sustainability, and motivated acting upon one’s knowledge of climate change (Lehtonen, Österlind, & Viirret, 2020, p. 1, 21). However, to my knowledge, the only embodiment method that directly links embodiment and extractivism and was described in the literature is *Cuerpo territorio*, developed and practiced in Latin America (Vasudevan et al., 2022, p. 4-5, 8). The practice was developed to help one locate within their body the physical tensions caused by the trauma of forced relocation due to extractivism (ibid.).

1.3 Research objective

1.3.1 Knowledge gap

Multiple themes can be recognised in the literature on extractivism and post-extractivism: extraction and utility of nonhumans, described as natural resources, to satisfy human needs and desires; extraction and its links to colonialism and capitalism; Latin American, indigenous and embodied approaches to understanding extractivism (Szeman, 2017, p. 445; van der Hout, 2022, p. 50; Ayelazuno, 2014, p. 294; Bridge & Wyeth, 2020, p. 254; Hickle et al., 2022, p. 5).

However, only a very limited number of studies expanded explicitly the understanding of extractivism to the level of mindset or imaginaries (Junka-Aikio & Cortes-Severino, 2017, p. 177; Arsel, Hogenboom, & Pellegrini, 2016, p. 881). The literature on multispecies justice discussed how the issue of exploitation of the other-than-human relates to people's imaginaries (Celermajer et al., 2020, p. 494). Yet, to the best of my knowledge, no studies have treated solely and explicitly extractivist and post-extractivist imaginaries in the context of Western Europe.

Except for the studies on *Cuerpo territorio*, no research has examined the connection between creative forms of embodiment and post-/extractivism. There is a knowledge gap in research on how embodiment could contribute to enabling post-extractivist imaginaries, especially in the context of Western culture, in which political economic structures and material demands in many cases drive and sustain extractivism (Lenzen, 2021, p. 24).

1.3.2 Aim

In the Western context, where extractivism is innate to the system and its negative consequences are experienced more gradually, it is essential to explore many possible ways through which people can get closer to such pressing issues (Stacey, 2021, p. 85). In this research, I explored whether artistic embodiment can contribute to enabling post-extractivist imaginaries, which in my definition manifest themselves in non-exploitative, reciprocal and regenerative relationships with the other-than-human, i.e. corporeal non-manmade nonhuman living and non-living beings (Virtanen, Siragusa & Guttorm, 2020, p. 78; Robinson & Cole, 2015, p. 135-136; Brand, Boos, & Brad, 2017, p. 37; Schwartz, 2021, p. 129; Kimmerer, 2013, p. 18; Chagnon et al., 2022, p. 762). Artistic embodiment offers approaches that can expand people's understanding of extractivism and post-extractivism beyond rational by incorporating emotional and embodied knowledge and proposing practices of enacting post-extractivist ways of being (Lehtonen, Österlind, & Viirret, 2020, p. 1, 21; Celermajer et al., 2020, p. 494).

To establish ways in which embodiment could be employed to help us move towards a post-extractivist society, I will be guided by the following research question (RQ):

RQ: How can artful embodiment contribute to enabling post-extractivist imaginaries in the context of Western Europe?

I supported my main research question with two sub-questions:

Sq 1: What elements of the artistic practices examined create the connection between embodiment and extractivist and post-extractivist imaginaries?

This sub-question was answered through interviews with the embodiment practitioners and the research of their practices;

Sq 2: What influence embodiment with post-extractivist features can have on people's imaginaries?

This sub-question was explored through the means of the participatory embodiment workshop (see 3. Methodological approach for elaboration).

1.3.3 Scientific and societal relevance

In terms of contribution to scientific literature, I addressed extractivism which is a sustainability issue related to social inequality and environmental degradation (Hidalgo-Capitán & Cubillo-Guevara, 2017, p. 15). With this study, I contributed to the reduction of the knowledge gap on how, if at all, embodiment practices could contribute to enabling post-extractivist imaginaries in the context of Western Europe. The literature so far, even if addressing the consequences of extractivism for the other-than-human, still presents them from the perspective of the human-centred economy, decolonality or environmental justice. Through this research, I contributed examples of embodiment practices developed and practised in the Western context, that refer to the other-than-human and have the potential to enable post-extractivist imaginaries.

This research has also a societal relevance since it presents examples of practices that can contribute to post-extractivist mentalities of people. Post-extractivism could reduce exploitation and put less stress on the natural environment contributing to the well-being of all (Hidalgo-Capitán & Cubillo-Guevara, 2017, p. 15). The artistic embodiment practices I researched are designed to be not only personal practices of the artists but have already been shared. The practices have already found resonance with their audience. Thus, I believe it is worthwhile to bring attention to them and introduce these and similar practices to people not familiar with them yet.

1.3.4 Approach

In this research, I took an art-informed research approach (Cole, Knowles & Cole, 2011, p. 121). My research topic was inspired by the work of Fossil Free Culture NL on post-extractivist culture (Stedelijk, n.d.). I combined academic developments in the post-/extractivist and embodiment discourses with artistic practices developed in and outside of academia. My research produced intellectual as well as embodied and emotional knowledge, as well as practical contributions on how embodiment can be practised to shift people's imaginaries towards post-extractivism (Cole, Knowles & Cole, 2011, p. 124). I also shared my knowledge of embodiment practices through a workshop open for people to join and I incorporate people's experiences of my workshop in this thesis. In that way, I hoped to make my research relevant not only to my thesis report but also to my local environment and people interested in my research topic and related concepts.

1.3.5 Structure of the Thesis

This thesis is structured as follows. In the section 2.Theoretical Framework, I elaborate on how, in the context of this research, I understand and apply the concepts and terms of the other-than-human, extractivist and post-extractivist imaginaries, embodiment and art-informed research. The 3. Methodological approach section explains how I proceeded with the interviews with embodiment artists and the embodiment workshop. In my 4. Results, I describe the differences and commonalities among the embodiment practices I researched and the recurring themes in how the artists I interviewed understood post-/extractivism. I complement the theoretical findings with the observations I made during my workshop and the reflections people had on the practices I developed. 5. Discussion is composed of the evaluation of how my research contributed to the academic discourse on post-/extractivism and the advancement of embodied or emotional knowledge. I also reflect on my methods and experience of performing this research. I ended this thesis report with the main 6. Conclusion coming from my research and the answers to my research question.

2.Theoretical Framework

To address my sub-questions and finally, my research questions I used some concepts which need clarification. These concepts are other-than-human, extractivist and post-extractivist imaginaries, embodiment and art-informed research theory.

2.1 Other-than-human

My research is concerned with the human extractivist and post-extractivist imaginaries related to the other-than-human. In this research, I define the other-than-human as corporeal

non-manmade nonhuman living and non-living beings, such as animals, plants, rocks or water (Virtanen, Siragusa & Guttorm, 2020, p. 78).

The literature, however, recognises other terms with which one can address nonhumans, such as non-human, more-than-human or multispecies. I followed Chao (Price & Chao, 2023, p. 181), who suggested using the *other-than-human*. The scholar argues that *multispecies* come from particular scientific secular traditions, while *non-human* underlines and perpetuates the problematic dichotomies and does not appreciate the diversity of beings that are not described as humans (ibid.). *More-than-human*, on the other hand, points towards the humility of humans and counteracts the idea of the superiority of humans over other life forms present in many Western epistemologies, which aligns with the intention of my research (ibid., p. 180). Yet, *more-than-human* includes *more* which suggests some hierarchy. Other-than-human is not unproblematic, as it still uses the human condition as a point of reference and does not recognise the diversity of the beings that the term could refer to (ibid.). Yet, the term appears to be less conclusive - a being is not just not human. Thus, I find it possibly the most appropriate to use considering the intention of my study.

2.2 Extractivist and post-extractivist imaginaries

Before I define extractivist and post-extractivist imaginaries and their implications for the human/other-than-human relationship, I first explain how, in the context of this research, I understand the concept of imaginaries.

2.2.1 Imaginaries

I defined imaginaries as how people imagine and think of the world around them (Taylor, 2007, as cited in James, 2019, p. 40). The term links to practise, as the imaginaries are often not described theoretically or communicated explicitly, but through for instance practices, stories or symbols (Taylor, 2007, as cited in Beaman & Stacey, 2021, p. 4; Parameshwar Gaonkar, 2002, p. 4). Parameshwar Gaonkar (2002, p. 4) wrote about social imaginaries, which can be seen as individual subjectivities. Through social imaginaries, people understand their identities and place in the world and build implicit understandings that underlie and make possible common practices. In this study, I limit my understanding of the imaginaries to what Strauss (2006, p. 323) called *person-centred* imaginaries, meaning imaginaries of individuals. I do not think my findings are generalisable and therefore I did not expand them into what could be called an imaginary of (Western) society in general (ibid.).

2.2.2 Extractivism, post-extractivism and their imaginaries

In this thesis, I expanded the idea of extractivism and post-extractivism as a narrative or a mindset, mentioned in the literature (e.g. Willow (2018, p. 5) or Acosta (2013, p. 81-82) in 1.2

Previous research). I describe the concept as imaginaries, which manifest themselves in particular actions towards the other-than-human motivated by extractivist or post-extractivist mindset.

In this research, I define extractivist imaginaries as the exploitation of the other-than-human, which can manifest itself in non-reciprocal relationships with and exhaustion of the exploited beings.

For quite some time, I was struggling to put together elements characterising extractivist ways of thinking and acting from various research papers. I came across the guidelines of Honorable Harvest written down by Robin Wall Kimmerer (2013, p. 194), which include the following rules:

“Know the ways of the ones who take care of you, so that you may take care of them. Introduce yourself.

(...)

Never take more than half. Leave some for others.

Harvest in a way that minimizes harm.

(...)

Give a gift, in reciprocity for what you have taken.

Sustain the ones who sustain you and the earth will last forever.”

Throughout “Braiding Sweetgrass” (Kimmerer, 2013), the author kept returning to the ideas of reciprocity, “never taking more than a half” and sustaining other beings, which to me expressed how we should act if we were to go beyond the extractivist exploitation towards post-extractivist ways of being.

In extractivism literature, the concepts of exploitation and lack of reciprocity have been mentioned repeatedly (Chagnon et al., 2022, p. 762; Durante, Kröger, & LaFleur, 2021, p. 3, 20; Nygren, Kröger & Gills, 2022, p. 735). The issue of environmental degradation linked to extractivism was also often addressed (Nygren, Kröger & Gills, 2022, p. 747; Dagar et al., 2022, p. 18209; Perreault, 2018, p. 230). I found it important to recognise the degree of degradation extractivism drives in the other-than-human. The exhaustion and ruination that extraction often leaves behind, deny the possibility of sustaining the other-than-human (Perreault, 2018, p. 230).

2.2.2.1 Extractivist imaginaries

Extractivist imaginaries are characterised by exploitation, exhaustion and non-reciprocal relationships with the other-than-human.

In this thesis, I use Zwolinski’s (2012, p. 156) definition of exploitation, which means treating other beings in ways that harm them or leave them in a disadvantaged situation, for one’s

benefit. To give an example, intensive agriculture, which aims to meet the needs of people, tends to exploit the soil often leaving it eroded and polluted (Tsoraeva et al., 2020, p. 2).

Extractivist actions are in many instances characterised by a *lack of reciprocity*: one takes without giving anything in return, from a particular being or common good (Kimmerer, 2013, p. 198). Further, reciprocity requires that one gives regardless of whether obliged by agreement or contract and strives to give back proportionally (Kimmerer, 2013, p. 198; Francis, 2008, p. 1007-1008). What is particularly interesting to me, is how one can build a reciprocal relationship with an other-than-human. The commodification of other-than-human and a sense of entitlement to their exploitation are common in many environments of Western society (Bermejo & Bermejo, 2014, p. 22-23; Mittal & Gupta, 2015, p. 27). I was interested in seeing how the other-than-human can transition from being viewed as goods to be managed and exchanged by people to independent beings that receive something in return for what they provide to us.

Finally, as I mentioned before, extractivism tends to lead to the *exhaustion* of the other-than-human (Perreault, 2018, p. 230). In this thesis, I defined exhaustion as the (almost) complete depletion or destruction of resources or other beings, which can violate the capacity of living and non-living beings and systems to self-heal and sustain themselves (Wen et al., 2018, p. 2). Exhaustion can be a consequence of a lack of reciprocity, as one does not replenish what was taken. It also links to overconsumption of material goods, which does not respect the limited volumes of resources (Kopnina, 2016, p. 29). In this study, I wanted to explore how and why people violate the need for regeneration in other.

2.2.2.2 Post-extractivist imaginaries

In my definition, post-extractivist imaginaries respond directly to the issues extractivist imaginaries address: exploitation, exhaustion and lack of reciprocity. Therefore post-extractivist imaginaries mean a non-exploitative attitude towards other beings manifested through reciprocity and not taking more from other living and non-living beings than they can regenerate preventing exhaustion, ideally contributing to their flourishing (Robinson & Cole, 2015, p. 135-136; Brand, Boos, & Brad, 2017, p. 37; Schwartz, 2021, p. 129). Below, I describe in detail how, for this thesis, I defined reciprocity, non-exploitative and regenerative ways of treating the other-than-human.

Extraction of some kind is inevitable. So rather than trying to avoid extraction altogether, I propose ensuring that relationships involving extraction have a *reciprocal character*, where one takes but also gives back (Rose, 2017, p. 496). According to Becker (Becker, 1986, in Francis, 2009, p. 1008-1009) reciprocity is a “character trait to be cultivated” rather than a rule to be followed mechanically.

For a long time, I have struggled to understand how I could build reciprocal relationships with other-than-human beings. How do I create a reciprocal relationship with for example a tree that gives me but cannot tell me what it needs or wants, at least not in the language I can easily understand? To observe the tree's needs I would need to attend to it, possibly for a certain period, to observe how it is impacted by for example changing environmental conditions (Kimmerer, 2013, p. 18). But what if that is not possible? Becker speaks of reciprocity as not only a set of one-on-one exchanges (Becker, 1986, in Francis, 2009, p. 1008-1009). One can give something in return not necessarily to a particular being, but for the common good, for the benefit of the present or the future (ibid.).

Reciprocity may, however, not prevent the exhaustion of an other-than-human, especially, when reciprocating to the common good, but not directly to the particular being. Thus, I believe it is important to address their *regeneration*. In this thesis, regeneration means that, in the first place, one strives for *the least exploitative* treatment of the other-than-human by taking only what one needs (Kimmerer, 2013, p. 194). To enable *regeneration* one should leave the extracted other-than-human with as little damage as possible and ensure that the environment can flourish (Hidalgo-Capitán & Cubillo-Guevara, 2017, p. 41). Further, I argue that it is problematic to assume that we know what will contribute to another being's flourishing if we do not have a relationship with that particular being through which we can at least try to learn what they need (Robinson & Cole, 2015, p. 135). Some contend that our understanding of the needs of others is limited in general and that it is important to appreciate their capacity to regenerate themselves without our interference (Haraway, 2016, p. 129; Paital, 2020, p. 8). Nevertheless, what I see as our responsibility is observing when our impact becomes very significant and the damage we cause can be irreversible. I wonder if active protection from further extraction could be a reciprocal gift to those from whom we received it. Overall, I wanted to explore how people can (re-)gain the capacity to notice the need for and allow regeneration of other-than-human beings.

The concepts described above are far from being unambiguous and having set boundaries. In my definition, post-extractivist imaginaries intertwine with extractivist imaginaries since they refer to the same issues, exploitation, reciprocity and exhaustion. From now on, I will also use the abbreviation *post-/extractivist* imaginaries, when discussing aspects relevant to both post- and extractivist imaginaries.

Reading the discourse on all the characteristics I chose, I recognised that there is quite some nuance to consider and my assumptions may not be applicable universally. Finally, I believe that the definitions above are far from being exhaustive. I will elaborate on the limitations of these definitions in the 5. Discussion.

2.3 Embodiment

A vast body of literature suggests that body-mind dualism is one of the dominant strands in Western culture and philosophy (Fei, 2020, p. 209; p. 8; Grankvist, Kajonius & Persson, 2016, p. 126; Forstmann & Burgmer, 2017, p. 182-183). Body-mind dualism distinguishes the mind from the body and claims that the two can be analysed separately (Dempsey, 2009, p. 43). Researchers have contested, however, that the human understanding of the world is a body-mediated process and the body is not merely a medium to use learnt skills. Linking the body and imaginaries, described above, corporeal actions, such as rituals, can be a manifestation of people's imaginaries (Starr, 2019, p. 52).

In this thesis, I investigated embodiment practices. An embodied practice can refer to an abstract idea, such as embodying one's skeletal system, as well as an ordinary physical action, such as cutting a fruit (Krieger, 2005, p. 351; Cohen, 2017, p. 3). Nevertheless, a common thread for different modes of embodiment is an active and engaged body (Krieger, 2005, p. 351). McCardell (2001, p. 1) introduced the concept of embodiment as relating to the body not as an artefact or an object, but rather as an incarnation of interactions. The researcher spoke of *bodying* instead of the body, transitioning from a noun to a verb describing the body as a space of action and enactment of one's ideas (ibid.). I used the same lens for my research.

The embodiment practices I examined took a variety of forms - a mediation, a theatre act and a choreographed dance to name a few. However, I always looked out for the practices for which the body is not only a tool to convey the message behind the practice but a medium that by for instance bodily impulses, influences and enriches the content of the practice.

Above, I stated that Western society has a possibly problematic relationship with the body, i.e. often seen as detached from the mind and a mere instrument to use learnt skills. Yet, I consider it vital to recognise the approaches towards the body other than body-mind dualism can be found in Western literature. For instance, Edmund Husserl initiated the philosophical discipline of phenomenology, which seeks to understand the world through direct sensorial experience (Husserl, 1970, p. 22-23). Abram (1996, p. 37-38), based on Husserl, defined the body as a medium connecting individuals and their lived experiences of the surrounding environment, which could serve as a method to rethink and possibly alter the extractivist relationship one may have with nature and others. Some scholars advocate for holistic learning and claim that embodiment is an integral element of it, which allows one to perceive the world and *be* in the world through feeling, seeing, acting and relating to one another (Stolz, 2014, p. 485). Finally, Western philosophy itself is replete with various, often non-Western influences. For instance, Lee Mueller (2017, p. 187, 276) who I cite below, draws on elements of the culture of the indigenous community of the Lower Elwha Klallam in North America.

Coming back to the link between embodiment and post-/extractivism, already made in *Cuerpo territorio*, Mueller (2017, p. 178) argued that senses and bodily experience of the world could open space for people to learn so-called “other-than-human sensibilities” and invite them to look at the world through perspectives other than anthropocentric. Environmental regeneration requires accommodating the needs of other-than-human, whose voices are beyond human understanding (Kouritzin & Nakagawa, 2018, p. 684-685; Mueller, 2017, p. 197, 208). Understanding the human experience of things as a reciprocal, sensuous and dynamic encounter and allowing the mutually influential interplay between a human and other-than-human, mediated through the body, could favour more integrity with the surrounding world (Abram, 1996, p. 58). This integrity puts limits on the economy and invites a non-exploitative relationship with one another (Crist, 2013, p. 144). Thus, it could be worthwhile to explore the potential of embodiment to facilitate the development of imaginaries that take into consideration the well-being of the other-than-human and have post-extractivist features.

2.4 Art-informed research

Scholars aiming to transform and enrich the traditional research methods, explored the potential of art, as a valuable addition to academic inquiry (Sullivan, 2016, p. 20). My methodological approach was supported by art-informed research theory, which links academic knowledge and art forms in the research on societal transformation. Art and art-making can serve as media to communicate academic developments to a wider audience and engage people outside of academia in creating knowledge related to societal change (Cole & Knowles, 2011, p. 120). Art-informed research can provide observations that do not follow traditional academic research reasoning, which is often based on linear cause-and-effect relationships (Cole & Knowles, 2011, p. 121; Pigott, 2018, p. 886). I relate to this art-informed research in two ways: I investigated artistic embodiment practices and developed a workshop to apply and explore my findings from the interviews and desk research. The findings from my interviews and embodiment workshop, related to the multiple aspects of my research on human existence, such as physical, emotional, spiritual, social, and cultural adding to the academic content of my study (Cole & Knowles, 2011, p. 121).

3. Methodological approach

In this section, I explain the steps I took to: explore the post-extractivist features of several embodiment practices and apply my findings in an embodiment workshop to examine if embodiment can shift people’s imaginaries towards post-extractivism.

In my research, I took an approach of art-informed research methodology and followed the art-informed research methodological guidelines by Cole & Knowles (2011, p. 123-124),

summarised in **Table 1** The summary of methodological guidelines of art-informed research by Cole & Knowles, (2011, p. 123-124). **Table 1** The summary of methodological guidelines of art-informed research by Cole & Knowles, (2011, p. 123-124).

Table 1 The summary of methodological guidelines of art-informed research by Cole & Knowles, (2011, p. 123-124).

Feature	Description
<i>Intentionality</i>	<i>Intentionality</i> determines the intellectual purpose of my study and the desired social transformation I intend to activate.
<i>Researcher presence</i>	<i>Researcher presence</i> reflects how well I indicate the presence in the research process and content. It is expressed in the language I use, such as direct speech and implications of my self-reflection on how my positionality within the research impacts my results.
<i>Aesthetic quality</i>	<i>Aesthetic quality</i> informs how the art form communicates the content.
<i>Methodological commitment</i>	<i>Methodological commitment</i> determines how (well) my methods achieve the goal of my research.
<i>Holistic quality</i>	<i>Holistic quality</i> indicates the clear and seamless connection between my research goal and my methodology. To achieve holistic quality, I needed at least to try to step beyond distancing myself from people who contributed to my research and presenting my whole project as linear and compartmentalised. Instead, I had to make it clear how my process, methodology and interpretation of the results influenced one another.
<i>Communicability</i>	To realise the <i>Communicability</i> requirement my thesis report is required to be written in a language understandable to as many people as possible and my research process should also be accessible to the potential audience.
<i>Knowledge advancement</i>	<i>Knowledge advancement</i> determines the knowledge I contribute through my research. However, the knowledge can be understood broadly such as ways of knowing that can be rational, non-rational, embodied or emotional to name a few.
<i>Contributions</i>	<i>Contributions</i> reflect the practical and theoretical contributions of my research, meaning its theoretical knowledge on post-/extractivism and potential for

Alongside my research, I performed an internship at Baltan Laboratories, a cultural lab based in Eindhoven. The organisation has been actively exploring artistic and design practices that engage with embodiment in the context of an extractive economy and human-other-than-human relationships, which aligns with my research interest. Performing the internship allowed me to experience some of the embodiment practices and situate myself in the context to which my research seems relevant. Performing an internship also enabled me to make my research less extractive, since I could compensate for the time the artists took to speak to me and the knowledge they shared. I contributed to the realisation of the projects of Baltan my interviews were involved in and I am publishing the interviews I conducted on the website of the lab, promoting their artistic work.

Overall, my research was composed of three parts. To answer my main research question,
How can artful embodiment contribute to enabling post-extractivist imaginaries in the context of Western Europe?

I guided my research with two subquestions, that guided me through the exploration of post-/extractivist features of the embodiment practices (sub-question 1) and their potential to enable post-extractivist imaginaries (sub-question 2).

3.1 Desk research and interviews

To answer my first sub-question:

What elements of the artistic practices examined create the connection between embodiment and extractivist and post-extractivist imaginaries?

I first conducted desk research and experienced the embodiment practices performed by several embodiment artists and practitioners. Next, I interviewed eight embodiment artists and researchers, whom I met via a network of Baltan Laboratories or discovered through online and social media research. I chose the artists, who through their artistic practices, research and communication appeared to have sympathy for post-extractivist ideas.

3.1.1 Desk research and experiencing the practices myself

I began the collection of my data for this thesis with desk research. I explored the documented practices of the embodiment artists from the Baltan network and looked for those who may refer to post-/extractivism. I also expanded my research beyond the network of the organisation, as in the end there were very few people whose practice fit well into my research. To clarify, I decided to show the diversity of the practices, instead of exploring in depth for example one practice only, having in mind making embodiment accessible to as

many people as possible. Not every person interested in embodiment can or wants to for example dance. Since in my research embodiment served as a method to enable post-extractivist imaginaries, I thought that offering a variety of embodiment practices could help me reach more people and communicate the post-extractivist ideals to a wider audience.

Besides the written descriptions and video documentation available on the artists' websites and social media accounts, some of the practices of my interviewees were available to listen to or watch online as Dani D'emilia's [Co-sensing with Radical Tenderness](#) and [consistency](#) and Meredith Degyansky's [Unsettling the Settler](#). I also tried edible earths collected by masharu during the event [SOIL | EARTH | LAND | GROUND](#) and participated in the workshop [What is Economy for Whales](#) by Ianis Dobrev, organised by Baltan Laboratories.

3.1.2 Interviews

I reached out to thirteen artists and practitioners of embodiment. In the end, I conducted eight interviews, due to the unavailability or a lack of response from the remaining five. I analysed and used as input for my thesis only six interviews. The remaining two contained extensive elaboration on embodiment but missed the connection to the other-than-human. Four out of six of my interviewees in my final sample were Baltan collaborators, whereas the remaining two I came across through online research. I summarised the information on the medium, the interview type and how I came across the artists in **Table 2** Medium and interview type per artist.. The decision to perform one structured written interview was the result of the artist's request due to the language barrier.

I sent a consent form from Utrecht Univeristy to each of my interviewees to sign before the interview. In three cases, the artists gave consent verbally at the beginning of the interview. I audio-recorded all the spoken interviews and transcribed the recordings using the transcription tool on Microsoft Teams.

I initially tried to develop an interview template, which I could reuse for all the interviews to be able to compare the answers. However, my interviewees had very different backgrounds. Some were familiar with post-/extractivism and related concepts and addressed them directly. Other interviewees were not or only vaguely familiar with post-/extractivism, which required me to steer the conversation to discuss the topic without using the terms, the artists could find obscure (see 3.3 Methodological Design Limitations). The transcripts of the interviews are available on request.

Table 2 Medium and interview type per artist.

Purple colour marks artists I have reached via Baltan's network and green indicates that I have discovered their work via my research.

Artist	Medium	Interview type
masharu	online	semi-structured

Meredith Degyansky	online	semi-structured
Ianis Dobrev	online	semi-structured
Victoria Mckenzie	online	semi-structured
Dani D'emilia	online	semi-structured
Alina Marinelli	written	structured

3.1.3 Analysis

I analysed my data through concept- and data-driven thematic coding multiple times and at different stages of my research (Gibbs, 2012, p. 8-9).

3.1.3.1 Analysis of the results from the desk research and ethnographic explorations

Starting with my experience and observation of some of the practices and desk research, I looked for written or said references to post-/extractivism (Gibbs, 2012, p. 8). I looked out for literal mentions of extraction and post-/extrcativism, as some artists directly spoke about for instance extraction of resources and inexplicit mentions. I also searched for concepts, mentioned both explicitly and inexplicitly, related to my definition of post-/extractivism, i.e. exploitation, exhaustion, lack/practice of reciprocity and regeneration.

Further, I examined and described *the form* and *the content* of particular embodiment practices. I examined the exact forms the practices took, whether they required any materials or particular settings, involved movement, which senses were most activated etc. Then I took a fresh look and performed content-related data-driven analysis looking for recurring themes, concepts and ideas, not necessarily directly related to post-/extractivism.

I used the results of the above-described analysis to prepare for my interviews and write initial ideas about themes to incorporate into my workshop.

3.1.3.2 Analysis of the results from the interviews

I analysed the data from my interviews in a similar way, performing both concept- and data-driven thematic coding (Gibbs, 2012, p. 8-9). After the concept-driven analysis of both literal and inexplicit mentions of post-/extractivism, I compared my definition of post-/extractivism to how my interviewees defined it (see **Figure 4** Comparison of my and the artists' definitions of extractivism.and **Figure 5** Comparison of my and the artists' definitions of post-extractivism.).

Data-driven analysis enabled me to further identify themes in the reflections my interviewees had on the topic, on their practices as well as the potential and the meanings behind engaging with the body and embodiment, which enriched the conceptual content of my thesis (Gibbs, 2012, p. 8-9).

3.2 Embodiment workshop

To answer my second sub-question:

What influence embodiment with post-extractivist features can have on people's imaginaries?

I gave a workshop on the embodiment of post-/extractivism and collected the reflections of its participants on how the practices impacted them. My workshop was simultaneously a result of my desk research of embodiment practices and a method to obtain the results needed to answer the second sub-question.

Since it was beyond my capacity to invite my interviewees to give a separate workshop as a part of my research, I decided to develop one myself. I opted for participatory embodiment practices. I intended to at least try to (partially) overcome the problematic distinction between the maker, often seen as holding the power to create art or a particular experience and the audience that is meant to passively observe and judge the result of the maker's work (Pigott, 2020, p. 884). I considered my capabilities as a facilitator and embodiment practitioner and decided to use mediation, guided movement and a breathing exercise as embodiment methods for my workshop. I communicated the post-extractivist ideas in the text of my meditation, the text and the form of the guided movement and the design of the breathing exercise (for elaboration on the exercises, see [Table 3](#)).

3.2.1 Workshop and questionnaire

I decided to perform the workshop to observe how people possibly unfamiliar with embodiment and post-extractivist ideals would react to such practices, and how, if at all, they influenced their imaginaries.

The workshop took place on the 3rd of November 2023 at EMMA Centrum in Utrecht. I disseminated an invitation for the workshop via my University students' network, my colleagues at BAK, basis voor actuele kunst in Utrecht and their networks. Seven out of ten registered people participated in the workshop. The invitation message can be found in 8.2 Appendix 1.

I started the workshop with an introduction to my research and written consent to participate followed by three embodiment exercises described in **Table 3**. The overview of the exercises I designed for the embodiment workshop.

Table 3 The overview of the exercises I designed for the embodiment workshop.

For a more detailed description of the exercises see 8.2 Appendix 2.

Exercise	Description	Comments
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<i>The Body Scan</i>	In my meditation, I focused strongly on people's relationship with the other-than-human and its post-/extractivist features. I invited the participants to become aware of the physical sensations in their feet, legs, bellies, shoulders and heads. For each body part, I added a short story referring to some aspect of extractivism, such as the labour of extracting natural resources for the production of electronic devices.	Body scan is a common meditation approach, during which one brings awareness to particular body parts and sensations they experience. The body scan I developed was inspired by "Unsettling the Settler" by Meredith Degyansky.
<i>Becoming Jellyfish</i>	First, I presented the participants with some printed visuals of jellyfish and then with prompts to try to embody the experience of being a jellyfish. In this exercise, the participants were invited to incorporate some movements according to their ideas of how jellyfish move.	The exercise was inspired by my experience of the workshop "What is Economy for Whales" by Ianis Dobrev
<i>Breathing with a Plant</i>	Each participant chose one potplant I brought. In my take on this practice, however, I only gave a short introduction in which I pictured breathing as a reciprocal and intimate relationship between a person and a plant. The participants were invited to explore this relationship with the potplant themselves.	My practice was inspired by a practice available freely as an online video by Kosha Ho, a practitioner at The Embodiment Insitute ¹ .

After the last exercise, I facilitated and audio-recorded a group discussion on the participants' experiences during the workshop. It was an open discussion, during which I invited them to share anything they wished to share that came up during the workshop. I followed up with a questionnaire to be filled in by the 10th of November, to gather more detailed reflections and experiences of the participants. The transcript of the group discussion and the questionnaire responses are available on request.

The detailed plan, script and questionnaire results can be found in 8.2 Appendix 2.

¹ <https://vimeo.com/794297137>

3.2.2 Analysis

Again, I performed concept- and data-driven thematic coding for the data from the questionnaires and recorded the group discussion (Gibbs, 2012, p. 8). For the concept-driven analysis, I looked specifically for:

1. An indication of whether the practices resonated with the participants and in what ways.
2. Changes in how the participants understand their relationships with other beings.
3. Indications of the desire and ways to change their extractivist behaviours.

With the first theme (1.), I wanted to establish whether embodiment can be a promising technique to apply when trying to impact people's imaginaries. As stated in the Theoretical Framework (section 2.3 Embodiment), some authors assert that embodiment plays a role in shaping people's imaginaries, yet those statements are rather general (Starr, 2019, p. 52).

The second theme (2.) is related to the change in the imaginaries, i.e. the ways people see and think of the world around them (Taylor, 2007, as cited in James, 2019, p. 40). In particular, I wanted to see if the workshop changed how people think of other beings or imagine their relationships with the other-than-human. I do not intend to draw any causal relationship between the change in the ways of thinking and the change in the ways of being. Yet, I take the position, supported by for instance Cronen (2001, p. 21, 23-24) that knowledge can inform actions.

In this research, I was particularly interested in how imaginaries can be altered via embodiment practices. Moreover, I was curious to see if the alteration of imaginaries could trigger a change not only in the ways people think but also in the ways they behave (theme 3.). Due to my research design, I was not able to observe the long-term impact of my workshop. Yet, I looked out for mentions of the actions related to post- and extractivism that people want to either incorporate or quit in their daily lives.

Through data-driven analysis, I explored other themes within the participants' reflections. I examined whether the reflections informed further the three themes I determined above or were additional findings that enriched my study or were suggestions for further research.

3.3 Methodological Design Limitations

As far as the methodological design of my research is concerned, I believe my study would be far richer if I could experience in person the practices of all my interviewees. In that way, my ethnographic observations would be more detailed, accurate and consistent (Muncey, 2005, p. 78). Yet, I still experienced, in person or online, five out of ten and remained in touch with the artists about the possibilities of experiencing their work in person as I proceeded with my research.

The reliability of my study could also be increased if I created a more rigid interview guide that would allow me to ask more similar questions to my interviewees and compare answers more easily (Fusch & Ness, 2015, p. 1409). Nevertheless, I managed to maintain consistency in the themes I discussed with six of my interviewees. We discussed the artists' views on embodiment and why they incorporated it into their practices, with a reference to particular practices of theirs, which I believed linked to post-/extractivism. I also asked the artists about their understanding of post-/extractivism.

The number of workshop participants was rather small. The location and design of my workshop and my workshop design allow for a maximum of ten participants. In the end, seven people joined it. Moreover, I performed only one workshop. I am aware that having a series of workshops would enable me to improve the facilitation and increase the reliability of my findings by enlarging and diversifying my sample (Ahmed & Asraf, 2018, p. 1505). Nevertheless, this study is rather explorative - an initial step in the exploration of embodiment practices related to post-extractivist imaginaries in the Western context. Therefore, developing a series of workshops would be a suggestion for further research.

It is also worth mentioning that my design of the workshop was driven by my affinities with particular embodiment practices, in terms of embodiment methods, such as movement, and shaped by the networks you are embedded with and my capabilities as an embodiment facilitator.

I reflected on the quality and the added value of the workshop in the 5. Discussion section, supported the methodological guidelines summarised in **Table 1** The summary of methodological guidelines of art-informed research by Cole & Knowles, (2011, p. 123-124).

3.4 Research ethics

I address my research ethics, focusing on the ethical aspects of researching post-/extractivist imaginaries which link to environmental justice and ideas of human/other-than-human relationships.

Starting with my positionality, I am writing this thesis as a Master's student, of Polish origin, at a university situated in Western Europe. My interpretation of the data will surely be influenced by Eurocentric bias, the Western higher education system I am part of as well as my origins in post-Soviet, religious provincial Poland (Rabikowska, 2010, p. 62). I cannot overcome these biases completely. Nevertheless, I commit to a continuous effort to self-reflection especially on the topics I am particularly biased about, such as spirituality.

Looking more closely at the Western context I am situated in and address in my research question, some of my interviewees come from non-Western contexts or/and reflect non-Western traditions in their practices. Moreover, I frequently cite non-Western scholars such as Robin Wall Kimmerer, a Citizen of the Potawatomi Nation and a scholar at an American university or Alberto Acosta, an Ecuadorean economist, researcher at FLACSO and former

Minister of Energy and Mines in Ecuador. Yet, I find it necessary to be mindful not to appropriate these teachings. For example, the content of my workshop comes from multiple, possibly non-Western inspirations, which I am transparent about and I claim no ownership of the workshop design and content. I invited the participants to reproduce it themselves if they wished.

Finally, I am aware of the fact that even though with this research I intended to overcome certain dichotomies such as body-mind dualism, I occasionally used other terms such as *environment* or *nature* in opposition to *human*, emphasising these dichotomies (Biermann, 2021, p. 61). Further, when speaking of extraction, I referred to the other-than-human as *natural resources*. I am aware that such language sustains the thinking of the other-than-human as commodities and instruments to satisfy human needs, which I am attempting to oppose with this research (Bridge, 2009, p. 261-262; Bridge & Wyeth, 2020, p. 253-254). Yet, it is a commonly used formulation in the discourse of extraction and extractivism and I decided to use it when referring to the existing literature.

4. Results

In the section below, I describe the diversity in form and content of the embodiment practices I analysed. Then I elaborate on how the artists define extractivism and what would need to change in how people living in the West understand their relationship with other-than-human. Finally, I present post-/extractivism-related experiences and reflections of the workshop participants.

4.1 *Part 1: The practices*

In my research, I explored multiple embodiment practices that relate to my definition of post-/extractivist imaginaries (see **Table 4** The descriptions of the practices I analysed in my results per artist). Bringing them all together, one can see that they represent diverse approaches to embodiment and topics related to post-/extractivism in general. Below I explore differences and commonalities of how they engage with the body (e.g. movement or meditation) and the other-than-human and how they link to different concepts, such as human dominance over the other-than-human or human desire for perfectionism, captured in the content of the practices.

I find it important to keep in mind, however, that the content informs the form and the form informs the content. Thus especially when describing the content, I referred back to the form.

Table 4 The descriptions of the practices I analysed in my results per artist.

For detailed descriptions see 8.3 Appendix 3.

Artist	Practice	Description of the Practice
Meredith (she/her)	"Unsettling the Settler"	<p>The practice was a meditative body scan accompanied by background ambient sounds.</p> <p>The content of the practice was guided by the question of how capitalism feels in people's bodies. For example, Meredith links the tiredness of the feet to overworking in an underpaid job that requires standing, which one needs to perform to make ends meet in the capitalist economy. The artist ends the meditation by asking the audience to reflect on how informed by the physical sensations in their bodies, they would like to change how they act in their lives.</p> <p>The artist refers to nature as a place of healing and desires sensorial interactions with nature in forms such as sounds of rain recorded to help people fall asleep or scents captured in candles.</p>
Ianis (he/him)	"What is Economy for Whales"	<p>After an introduction to how some of the animals sense the world, we read the short three texts written by Ianis on how dolphins, manatees and whales experience their surroundings and tried to imagine with our eyes closed how it would be to live in water a dolphin, manatee or whale. Finally, we discussed how having tried to see the world from the perspective of a whale, what value, debt and economy are for whales.</p>
masharu (they/them)	earth eating	<p>For earth-eating practice, masharu collects edible soils and clays from around the world (when travelling, purchasing them online or as gifts from others) and offers them to the audience to touch and feel their consistency with their hands and taste them. Some people shared that, next to experience different flavours of soils and clays, they also had a feeling of being transported to places that they were reminded of by the taste, the texture of soil/clay and the feelings the soil evoked.</p>
	Intercourse with Clay	<p>The theme involved multiple performances and workshops, during which masharu together with other artists and the audience interacted with the soil and clay with their whole bodies. The performances/workshops explored different topics on human interaction with soil, such as the interrelation and non-Western traditions of manifesting the human-</p>

		earth relationship.
Dani (she/they)	"Co-sensing with Radical Tenderness"	<p>"Co-sensing..." was a performative reading of the text based on the writing by Dani, Vanessa Andreotti and Gesturing Towards Decolonial Future collective.</p> <p>Dani invites the audience to follow their moves as they perform the reading and begins with gently touching their face. Next, the artist spreads clay over their body with the movement. Dani recognises other-than-human bodies as parts of their body: Dani's neck is a waterfall, ears are succulent plants and hands are parts of plastic packaging Dani opened in their life. The artists invite the audience to recognise their bodies as part of the collective body of earth and the beings that inhabit it. Finally, the light in the video gets darker and the artist invites people to self-reflect on the patterns of behaviour (e.g. individualism, need for control) and relating to others they have learnt throughout their life.</p>
	"consistency"	<p>The practice was a documented research process performed together with Fernanda Eugenio as a part of the project Dis-solution practices.</p> <p>The artists stand in water and attempt to dissolve the contours of their bodies and rid of their identities by looking at the blurry reflections of their faces on the surface of the water (Fernanda) and by covering their face with the layer of mud from the bottom of the water body (Dani).</p>
Alina (she/her)	"baldio"	<p>In the documented research process, Alina grows plants and examines their development. The artist touches the wet soil and the roots. Alina understands plants as beings that interrupt the automatization of our lives and invite mindful observations of their growth. The artist accompanied her process of growing plants with a list of questions, such as: "How to generate intimacy with plants?" or "How not to impose, colonize?" (MAGMA, n.d.).</p>
	"Hacer un pozo"	<p>The practice is a choreographed performance "Hacer un pozo" on rhabdomancy, an ancient practice of sensing the underground bodies of water such as lakes or streams (Marinelli, 2023). In the performance, Alina and her fellow performers Camila Malenchini and Mariana Montepagano, transport water between different vessels in their mouths and carry the water in their pieces of clothing. They pass the gulps of water to one another, on their way between vessels, in gestures that look like kisses and spits (Gomez, 2013).</p>

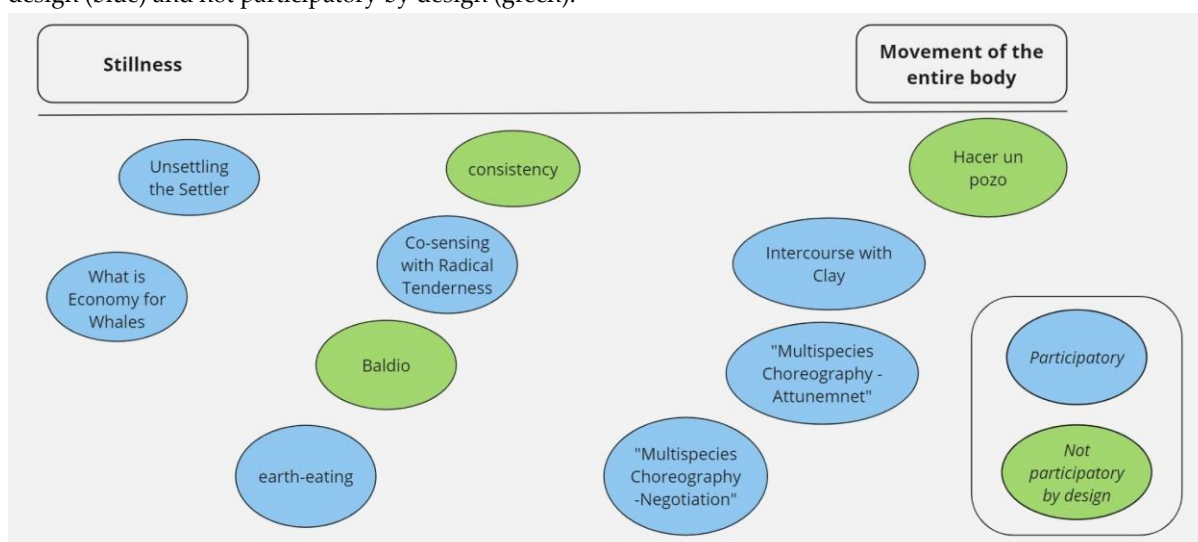
	"Multispecies Choreography - Attunemnet"	<p>The performance was a score of "Multispecies Choreography" and a collective practice, in which a group of participants was given a piece of fabric to walk around the field with, holding the fabric with their hands close to their bodies. The practice was inspired by the movement of cow/cattle-herding.</p>
<p>Victoria (she/her)</p>	"Multispecies Choreography - Negotiation"	<p>During the "Negotiation" score of "Multispecies Choreography", Victoria sat around fungi together with her students and moved their bodies in what the artist called <i>negotiation</i>. Depending on what people sensed and observed, once they would become passive letting fungi decide how the interaction proceeds, then the people would move according to what they wanted to express.</p>

4.1.1 The diversity of the practices

Examining the form, the practices could be placed on the spectrum regarding how much bodily movement they require (**Figure 1** Practices according to the engagement with the body.). Starting with the meditative practices, which were performed while sitting rather still and in silence, one can observe a transition to eating soil and touching one's body and the bodies of the other-than-human which involve some bodily activity. The spectrum ends with the practices of movement, dance and choreography.

Figure 1 Practices according to the engagement with the body.

Practices can be placed on the spectrum regarding how much bodily movement they require (from left to right): still and meditative practices, practices that involve some movement of the body and choreographed and dance practices. The practices also can be categorised concerning the participation of the audience: participatory by design (blue) and not participatory by design (green).



“Unsettling the Settler” by Meredith Degyansky and “What is Economy for Whales” by Ianis Dobrev were examples of still and meditative practices. “Unsettling the Settler” was a meditative body scan. The practice can be performed sitting or lying down in a place that allows one to focus on the text of the meditation. The practice intends to increase the awareness of the listeners of the different parts of their bodies and the artist encourages only to feel the weight of one’s body and let the body relax.

The practice in the “What is Economy for Whales” workshop shared some features with “Unsettling the Settler”. The practice of Ianis also had a meditative character and did not require movement, being rather a thought experiment based on scientific knowledge of animal biology and cognition (Baltan Laboratories, 2022). During the workshop, we were sitting still, in silence with our eyes closed. Yet, we were free to decide whether we wanted to incorporate any movement into the practice.

A common thread for the practices that required bodily movement was the interaction with the other-than-human (see **Figure 2** The practices according to how they engage with the other-than-human.). In all the practices the interaction was physical and in the majority of the practices it was sensorial, engaging mostly with touch and taste.

All the practices that required a moderate amount of bodily movement - “baldio”, “consistency”, “Co-sensing...” and earth eating - involved interacting with the other-than-human through touch and tasting.

Alina, in her documented research “baldio”, touched the roots and leaves of the plants she grew. In “consistency”, Dani stands in water and spreads the mud over their face. The earth-eating practice also involves touching and feeling the consistency of the edible soils and clay, however, not only with people’s hands but also with their mouths and tongues. Dani’s performance, “Co-Sensing with Radical Tenderness” fits into the theme of touch too, especially when the artist spreads clay over their body (d’Emilia, 2021). However, in this practice, the touch involves feeling mostly one’s own body. As I mentioned in **Table 4** The descriptions of the practices I analysed in my results per artist., in the text of the practice, the artist explores other-than-human beings as parts of their body. Yet, Dani engages with the imagination rather than the physical bodies of the other-than-human.

Among the practices, in which the body was active and moving through space - “Hacer un pozo”, Intercourse with Clay and “Multispecies Choreography” (Attunement and Negotiation) - the former two involved touching and tasting.

In “Hacer un pozo”, water enters the bodies of the performers through, for example, their mouths (Marinelli, 2023). The water spills on their bodies and their moves are fluid imitating water (Gomez, 2013). In Intercourse with Clay practices, the artist, fellow performers and the audience roll in the soil spread all over their bodies and taste it.

Victoria’s “Multispecies Choreography” - “Attunement” and “Negotiation” were choreographed dance and walking scores, respectively (McKenzie, n.d.). They did not

involve touching, however, but rather sensing the presence of the other-than-human while in their proximity.

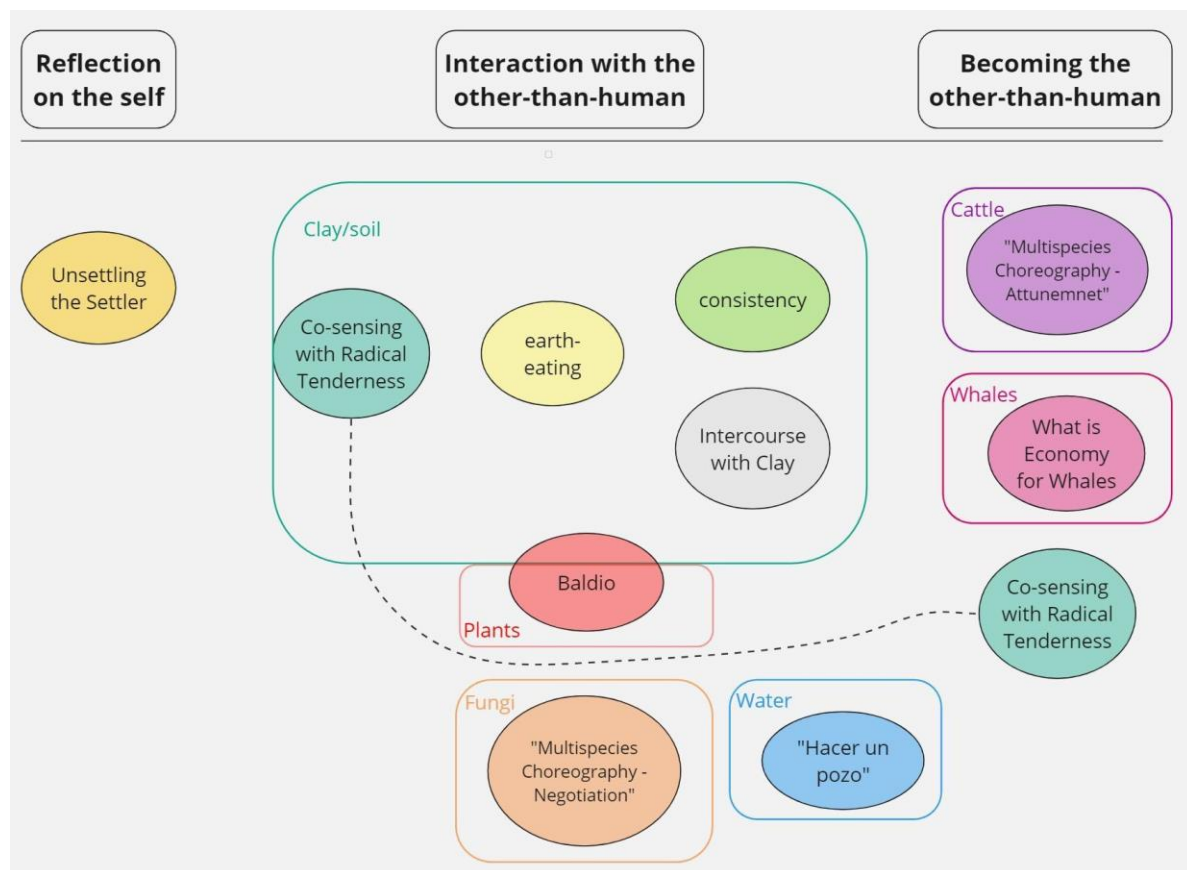
It is worth mentioning that Dani, masharu and Alina engage their whole bodies, often nude, to become media for interaction with the other-than-human. The artists take it even further than touching. Through particular gestures, the embodiment practitioners make the other-than-human penetrate their bodies. masharu eats earth, Alina swallows water while Dani in “Co-Sensing...” suggests the audience follow them in pushing the clay into their skin as if it were to enter their bodies through it (d’Emilia, 2021). These practices made me think about the earlier mentioned intimacy developed through the art-making process (see 1.2 Previous research), which according to Celermajer et al. (2020, p. 492) can help to disrupt human domination over the other-than-human. These practices also brought to my mind the concept of *queer ecology*, which I did not use in my theoretical framework, but appears to be relevant to my research. Queer ecology attempts to disrupt the heteronormative assumption about the sexuality of different beings and discusses intimacy and non-genital erotics in the context of human/other-than-human interactions (Morton, 2010, p. 274, 280; Sandilands, 2016, p. 169). (See 5.5 Connection to other discourses and suggestions for further research, for elaboration).

The majority of the practices were intended to be practised by the audience (see **Figure 1** Practices according to the engagement with the body.). The practices that did not engage with the audience by design were the choreographed performance “Hacer un pozo” and the documented research practices “consistency” and “baldio”. The participatory practices differed regarding the nature of the audience participation. In “Unsettling the Settler” and “What is Economy for Whales”, the participants were verbally guided through the practice. In “Co-sensing...”, the artist supported the verbal guidance by proposing the movements the audience could do. When negotiating with mushrooms in the “Multispecies Choreography”, the participants were given a type of movement characteristic to the score, i.e. dance moves choreographed by Victoria, but the artist enabled the participants to influence the designed movement throughout the practice and move away from dance to making movements while sitting around fungi. When eating earth, the audience was only prompted to explore the texture of the soils and clays with both their hands and mouths.

Regarding the diversity in the content, all the practices related to the other-than-human on the conceptual level (see **Figure 2** The practices according to how they engage with the other-than-human.). Yet, the approaches varied. Some artists focused on human- and self-centred reflection and attunement to their bodies. Others examined the human/other-than-human interactions, such as human/water interaction in Alina’s “Hacer un pozo”. Finally, some tried to see the world through the lens of the other-than-human.

Figure 2 The practices according to how they engage with the other-than-human.

The practices are presented according to how they engage with the other-than-human (left to right): through self-reflection and reflections on one's relationship with themselves that impact other-than-human, through conscious interaction with the other-than-human and through embodying the other-than-human. The colourful brackets indicate which other-than-human are interacted with or embodied. The arrow coming from the "Co-sensing" indicates that it falls into both categories: reflection on the self and embodying the other-than-human. The colours, same as in **Figure 3** The content-related themes the artist referred to in their practices., are meant to help to notice what features different practices share and how they differ.



The human-centred reflection and attunement to the human bodily experiences were key elements of "Unsettling the Settler" and "Co-sensing...". Interestingly, both practices referred to several norms and behaviours that are often considered desired by society, that motivate people's actions. The artists spoke of chrononormativity, striving for perfection, control and fulfilment of societal expectations. In "Co-sensing..." Dani recites: "Follow non-normative and non-linear time" or "Let go of the fear of 'being less', the pressure for 'being more' and the need for validation.". Meredith in her practice says: "You don't know why you care, but you want to care. You want to be perfect. What does it mean to be perfect?". In her "Unsettling the Settler", nature is the source of rest and a feeling of security for humans. The practice starts with imagining the connection between the core of the human body (a point above the belly button) and the centre of the earth, which is meant to evoke a feeling of groundedness. Meredith also mentions how people try to capture the sounds and smells of

nature to be able to sleep well and relax: “That thing nature that we bottled into jars and poured into candles to sell for the smell”.

“Co-sensing ...”, seems to also have elements of becoming the other-than-human though incorporated elements of imagining other-than-human bodies as parts of their body (see **Table 4** The descriptions of the practices I analysed in my results per artist.). Dani also proposed to: “Tune in with the collective body, both human and non-human.” Interestingly, “consistency” included a similar element, i.e. ridding of one’s identity to integrate with one’s environment. I wonder whether such practice is about *becoming other-than-human* or rather it is an embodiment of the interconnectedness of all beings and the entanglement of their bodies. This thought led me to the literature on *post-humanism*, which challenges the idea of human identity and corporeality as fully autonomous from the other-than-human and questions human exceptionalism (Greenhough, 2009, p. 209; Braidotti, 2016, p. 15) (see 5.5 Connection to other discourses and suggestions for further research, for elaboration).

Other practices that involved embodying other-than-human were “What is Economy for Whales” and “Multispecies Choreography” (Attunement). The former took a radical stand of trying to understand the man-designed economy from the non-anthropocentric perspective, through the lens of whales. “Attunement” was meant to explore the human ability to attune to other beings and recognise what humans can learn from their behaviour. These two practices link my findings back to my Theoretical Framework (see 2.3 Embodiment) and Mueller’s “other-than-human sensibilities” (2017, p. 178).

“Hacer un pozo” by Alina combined both an embodiment of the other-than-human and an examination of the relationship with water, exploring the human ability to feel and attune to others (Marinelli, n.d.). The artist and her collaborators simultaneously imitated water through their movements and allowed their bodies to serve as vessels for water appreciating it as crucial for life to exist and currently suffering due to a human-caused environmental crisis (interview).

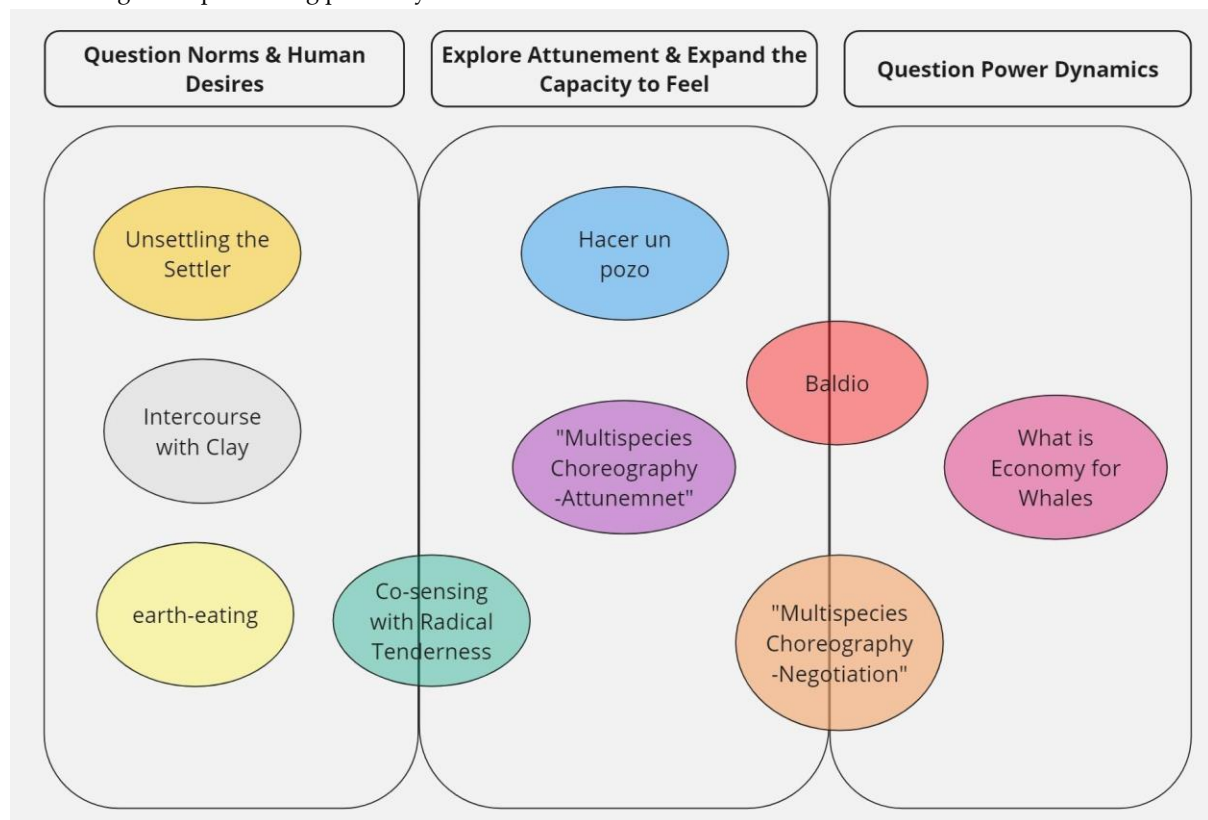
The remaining practices that focused on the human - other-than-human relationship were “baldio”, “Multispecies Choreography” (Negotiation), earth-eating and Intercourse with Clay. The former two reflected on human dominance over the other-than-human and attempted to observe and respond to what plants and fungi, respectively communicated. It brings to my mind “What is Economy for Whales” in which Ianis also attempted to show the influence people have on the other-than-human. Interestingly, the majority of the practices - earth-eating, Intercourse with Clay, “consistency” and “Co-sensing...” chose soil or clay as the other-than-human to interact with.

Finally, the practices of masharu, similar to “Unsettling...” and “Co-sensing...” addressed the norm existing in the society (see above), such as seeing soil as dirt and its eating as a

mental disorder. The artist attempted to show the power of connecting with the earth through the body and senses to change humans' imaginaries about the earth from being an abject or a resource to a being that is "alive and nourishing" (masharu, 2022).

Figure 3 The content-related themes the artist referred to in their practices.

The artist addressed extractivism in various ways in the content of their practices. The three main themes focused: on questioning existing societal norms and human desires, exploring the capacity to feel and attune to other beings and questioning power dynamics between the human and the other-than-human.



4.2 Part 2: Towards post-extractivism

I supported the desk research and experience of the embodiment practices with the interviews with their creators. In our discussions, I verified if my understanding of their works and their connection to post-/extractivism aligns with the artists' ideas behind their embodiment practices. Further, I enriched my literature research on post-/extractivism and embodiment with the artists' knowledge, thoughts and reflections on the concepts. Below, I outlined how the interviewed artists understand extractivism and the transition towards post-extractivism.

4.2.1 Extractivism

When explaining how they understand extractivism, Meredith, Victoria and Ianis referred to extractivism as a systemic issue and pointed out its connection to capitalism. Victoria and Meredith also elaborated on the historical aspect of extractivism related to colonialism.

In their artistic and research practices, Meredith often uses the frameworks of post-capitalism, while for Victoria, decoloniality is one of the central concepts. Meredith sees capitalism as a violent system that was built on colonialism, stealing the land and people and enslaving them to extract the resources from the land they live on. In our conversation, the artist stated that, in her view, post-extractivism touches on “the root problem” of capitalism. It embodies the values of capitalism, which are based on the extraction and exploitation of the natural world and people. As Meredith described in “Unsettling the Settler”, even the scented candles are a result of extracting from nature to help people relax with little effort and make money. Moreover, extractivism is an action-oriented concept. To Meredith, “extractivism signifies a “doing”, while capitalism is not necessarily a verb yet.” The word post-extractivism helps you understand what you need to do - don't extract, stop extracting.”.

Victoria explained extractivism as a colonial way of treating the land, i.e. seeing the land as a commodity that one can turn into capital and create (surplus) value. Ianis added that commodification of the other-than-human is a practice inherent to the global stock market making it rather clear that extractivism is a systemic problem. Ianis explained that currently, the global stock market sees only what has a monetary value on it. When extracted, commodified and possible to monetise, the other-than-human can enter the market and be a source of financial gain for people. Furthermore, both Meredith and Victoria stressed that the (financial) benefits of the extraction process are often not meant to be a common good but are directed to those whose interests drove extractivism in the first place, contributing to inequality.

According to Victoria and Meredith, both capitalism and extractivism relate not only to actions of for example extracting and commodifying resources, but also to the mindset that enables and perpetuates those actions. masharu shared a similar reflection, though they did not make a very explicit reference to capitalism. masharu sees the issue not only as an action of extracting resources but also as the contemporary exploitative mentality of “I need to get something out of everything in the limited time I have”. Every interaction is a transaction that one needs to benefit from immediately or in the foreseeable future. Further, it is not only about getting *something* out of everything but according to Meredith, capitalism makes us value more beings and activities that we can earn money from. Victoria points out that the extractivist mindset results in the objectification of other beings and their exploitation for our benefit.

Dani took a different approach when defining extractivism. The artist described it as the opposite of care. To understand what it means in practice, Dani asked themselves “What is

not care". They gave an example of a human-human relationship in which one side demands from the other round-the-clock care and support, without consideration of what they are willing or can offer. To Dani, this is how extractivism often manifests itself in our relationship with the other-than-human.

"(...) we're not being aware of up to where can we expect that person to be there for me all the time and up to when can I expect that mountain to be there all the time for me. (...)"

This reflection made me think of exploitation, which I consider one of the key characteristics of the extractivist imaginary.

These definitions rather clearly link to the themes identified in the literature on post-/extractivism: colonial extraction in the Global South for the benefit of the Global North and extractivism as a means to wealth accumulation (see 1.2 Previous research). It was also rather apparent that the artists see extractivism as a mindset. The artists look at extractivism from different angles, ranging from the global economy to individual relationships with the other-than-human. Yet, what they all saw was the separation between the humans and the other-than-human beings at the root of extractivism.

The perspective of Ianis' practice comes from the fact that the stock market does not recognise or value the existence of other-than-humans unless they can be turned into commodities that one can accumulate and sell and gain financial profits. Even then, they are not seen as autonomous beings, but resources for people to control and benefit from.

In the words of Victoria, to commodify the land one has to objectify it [earth], to see the earth as something to consume. "One has to see oneself as separate from the Earth. There's no longer subjectivity" since the subjects are turned into objects to be exploited. Further, the individualistic way people think of themselves perpetuates this separation. She says: "(...) we've created so many barriers, not allowing ourselves to feel others."

Meredith takes a very similar stand, stating:

"We live in a world that's really trying to force us to see ourselves as separate from other people, from land, separate from the chairs we sit on, separate from everything. While I think we're actually in a relationship deeply with all of these things."

Meredith shared a story which shows an example of how this separation is expressed in the way people think. In the story, Margaret Bruchac, an anthropologist of Abenaki Indian descent, was asked how indigenous people knew which plants they could consume as medication. Some of this knowledge people gained by watching animals. People observed which plants animals consume and when. They smelled and tasted the plants themselves. To Meredith, it is remarkable that back then people possibly thought that if for example, bears would eat certain plants, they would be edible for people as well. Nowadays,

however, especially in the so-called Western world, people seem to have forgotten that such connections are possible.

One of the goals of Meredith's practice is to break with the idea of people being individuals and develop a deep and radical sense of connection with other living and non-living beings. Yet, like masharu, the artist admitted that she struggles to recognise it on a day-to-day basis.

The reflections of Dani aligned with the views of other artists. However, the artist stressed that the separation is present on both physical and mental levels. To Dani, the lack of recognition of the physical unity between humans and the other-than-human makes people less sensitive to the harm done to the environment.

"I wouldn't allow certain things to be done to my body, physically, my human body. So how is it possible to allow them to be done to the wider body, which is also mine?"

Despite often conducting extensive research and practice aiming to overcome the extractivist logic, several artists admitted that they consider themselves extractors and/or fail to enact in their lives the messages they communicate through their art. When speaking to masharu, the artist confessed that it is the extraction and accumulation of edible soils, directly themselves or through others, that enables their practice.

Meredith was critical of her farming practice. According to the artist: "I realised that even small-scale, community-led farming is still harmful to people and the environment (...)"

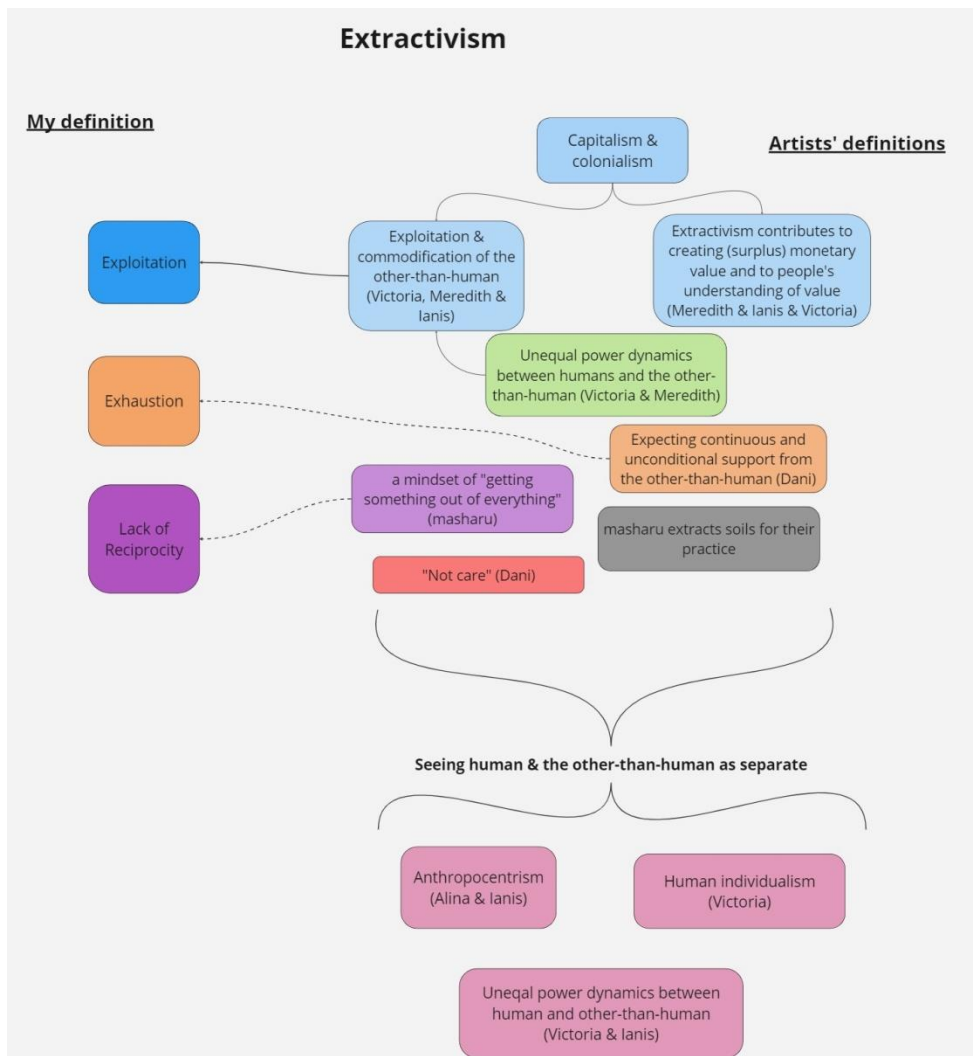
Dani, on the other hand, decided to embrace the impossibility of living a non-extractivist life. According to the artist, a sustainable lifestyle often requires a certain level of privilege, since, for example, not everyone can afford to follow a vegan diet.

"I think there are ways of showing up [for others] that are possible without expecting perfection. I think there is no perfection. (...) You can say: I'm going to be totally vegan, I'm going to be totally permaculture, I'm going to be totally flight-free. But then you also need to look at the level of privilege that allows you to be all those things"

Dani suggested instead to try to free oneself from the desire for perfection and accept the limits of one's knowledge and capacity to see beyond their perspective. As Dani said: "I started to understand that I had to refuse some things. For example, censorship voices that say: I'm not good enough or I don't have the consent of this tree to be lying underneath it. I have to refuse what is making it so difficult for me to just be in intimacy with this being."

Figure 4 Comparison of my and the artists' definitions of extractivism.

In the artists' view, one of the key issues of extractivism is the idea of the separation between the human and the other-than-human. The artists related this separation not only to extractivism but also to human individualism, anthropocentrism and unequal power dynamics between people and the other-than-human. In the brackets, I indicate which artist supported the statement. The solid lines show connections the artists made between their own and my statements. The dashed lines indicate my speculated connections between mine and artists' definitions of extractivism.



4.2.2 The artists' visions of the shift from extractivism towards post-extractivism

The artists followed their above-described realisations with propositions of how the disconnection between the human and the other-than-human could be overcome. The themes of reciprocity, dialogue with and attunement to the other-than-human through one's body and senses stood out to me throughout the conversations, which also linked back to the practices and my definition of post-extractivism regarding reciprocity (see 4.1.1 The diversity of the practices). Some artists also proposed different understandings of what the human and the other-than-human body/bodies are to prevent harming the other-than-human.

Starting with reciprocity, I was fascinated by how they learned and currently practice reciprocity with earth. When the artist collects the earth themselves, they leave some other soil in the collection place. They start the encounter by introducing themselves and

explaining to the place why they are there and what soil they brought. Interestingly, masharu sometimes pronounces these things out loud trying to have a conversation with the place. Often, they carry out this dialogue in their head, which then tends to turn into a reflection moment. masharu also added: “I also try to be mindful of my relationship with the earth outside of the collection moments.” Thus, they bring the soil to certain places without the intention to take some back with them.

Dani also brings up the idea of reciprocity. Yet, what they considered important to bring up, was the indirect reciprocity (“I received something here. But then I give it there. (...) Maybe with a certain friend, I'm always available to hear them. They're not really doing that for me, but I have another friend that's doing it.”) and a willingness to help those that we do not feel close to. “(...) it's kind of essential that we don't really show up just for the people that we fully feel very mates with.”

Though initially oriented towards human-human relationships, Dani expanded their research towards the relationships between humans and the other-than-human.

“(...) we [Dani and their collaborator Fernanda Eugenio] tried to put ourselves in relationship to other relations, other-than-human. And then to be in the awkwardness of how do I give you attention? How I don't fall into a place of indifference with you?”

During our interviews, masharu, Victoria and Meredith reflected on the idea of creating a dialogue with the environment. In the case of masharu's practice, the dialogue could be understood quite literally as described above. The artist suggested that it could be worthwhile to ask authorities or politicians to have a conversation with for example sea or land and ask them for their opinion on the decisions people want to make. Aware that, for some, the idea of speaking to a tree might sound like nonsense, masharu explained that conversation with the other-than-human can be a way for one to be honest with themselves. The artist experiences speaking to the other-than-human as a moment when they do not need to play any societal roles, do not feel judged and thus can reconnect with what they truly care about.

Victoria also spoke about the dialogue or even negotiation with the other-than-human. To the artist, extractivism is a one-sided process. People take without giving anything in return. The dialogue opens up a space for exchange.

For both Victoria and Meredith embodiment is a way to enact this dialogue. According to Victoria, by becoming aware of how their body is feeling, what it senses, hears and observes, one can connect with the environment around them and react to external stimuli, as the artist practised during one of the sessions of “Multispecies Choreography” (Negotiation) (see 4.1.1 The diversity of the practices).

Meredith, who farms herself, described how farmers communicate with the land through the senses, by for example tasting or smelling the soil. Through mindful and continuous

observation, they learn how the land and what is growing in it is changing and try to understand what the soil and its produce need. It reminds me of Alina's "baldio" and masharu's earth-eating (see 4.1.1 The diversity of the practices). What recurred in the interviews with both Alina and Meredith, was the notion of slowing down. Both artists believe that to be able to notice and understand the processes that occur around us, it is necessary to devote some time to being with the other-than-human and try to observe also changes they undergo over some time. "It's spending a lot of slow time in the same place. You're watching the soil year after year after year and different climate conditions." (Meredith)

According to Meredith and Dani, sensuous interaction with the other-than-human is deepened through attunement. For both artists, attunement means the realisation of our interconnectedness with other beings, on sensuous and cognitive levels, and acting accordingly. Meredith told me about Herlado, a 60-year-old Costa Rican farmer, who she worked with on her coop farm in Massachusetts. When observing him farming, to Meredith it looked as if he was "dancing with the land".

"He works on the land and he knows how to move like a person that's growing food. He knows how to hold his shovel with so much grace that his body looks like it's dancing with the land (...)"

I have to admit, I am still struggling to understand what exactly Dani meant by how they described attunement. To start with, what helped Dani understand and think of people's bodies as connected to the world around them, is to think of themselves as an extension of the land, instead of them extending into the land. To Dani, many people think that they own their bodies and therefore, the latter can potentially make people treat the land as something they own and are entitled to influence as they wish. Further, the artist sees the body as existing in four layers - *me*, *me and you*, *me in you* and *neither me nor you*. The first two layers are about who we are if we see ourselves as individuals and how we interact with others through different activities, though still seeing each being as an individual. The fourth layer refers to another culture and temporality. It requires thinking on the time scale of for example creation of the universe in which our lifetime seems insignificant. The third layer, *me in you*, however, is the most relevant to my research and recognises the commonalities and entanglements with other humans and the other-than-human.

"(...) if we go and trace back the materials inside our computers, the materials that we're wearing, sitting and so on, for sure, we will find that actually, there's a lot of commonality between what we are and how we are possible."

To Dani, the matter is what gives each being a shape and a border makes us believe that "me" and "you" or "me" and "the other" are separate beings. Yet, "the other" makes you who you are by being your food, clothing and so on. If you see the environment around you as you, you can feel what it feels. She says: "There is a layer in which, if you connect to it [the land], you just feel it [the pain of the land] because it's your body."

This reflection points towards the theme of how people think of the identity of the human and the other-than-human bodies, which was rather a prominent topic in the content of “consistency”, “Co-sensing...”, “Hacer un pozo” and eart-eating and Intercourse with Clay in which artists experimented with the culturally created boundaries between the human and the other-than-human bodies (see 4.1.1 The diversity of the practices). Quoting Meredith: “If we existed in a cosmology where we understood the land to be our mother, truly and deeply, would we be extracting into our mother? Would we be like drilling into our mother? Similarly, if we understand that we are deeply connected to the land, would we injure part of our foot on purpose?”. Dani proposes seeing oneself as land and explains the consequences of it: “I understood that my body is land. I’ve always had an approach that I am in continuity with it as if it is an extension of my body. And I think that leads to extractivist logic because it being an extension of your body, you can do with it, what you want. I guess that kind of sensibility is very different from that my body is actually an extension of the land. I wouldn’t allow certain things to be done to my body. So how is it possible to allow them to be done to the wider body, which is also mine?”

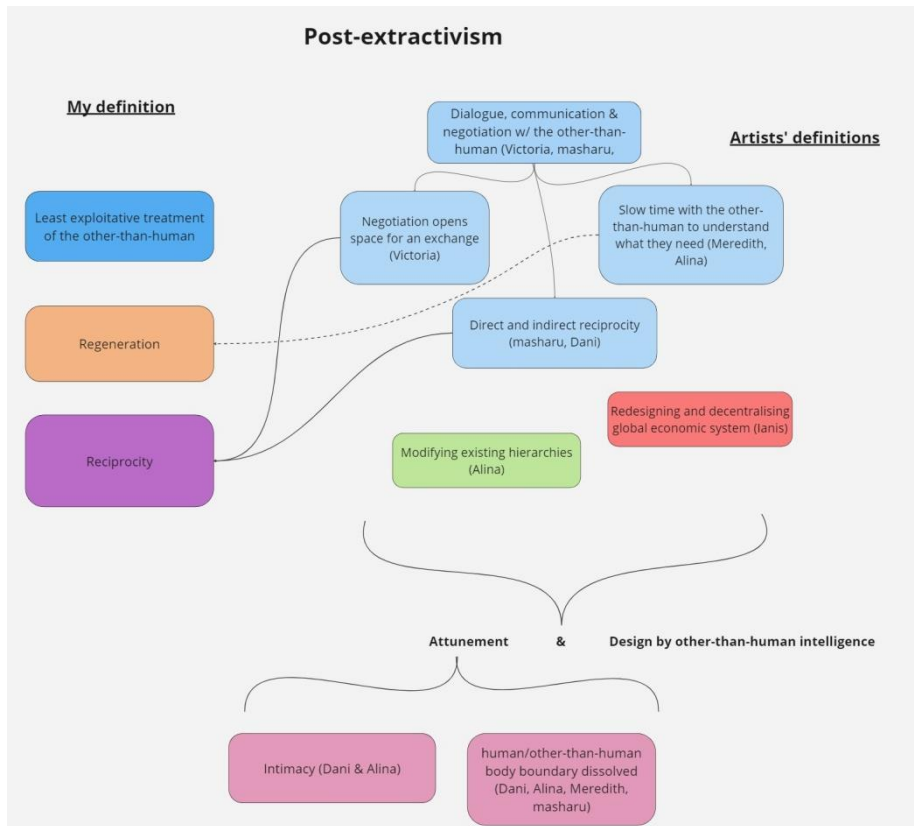
Ianis also suggested a change of imaginary that would enable people to relate differently to the other-than-human. According to the designer, the change in the economic organisation involves a change in human cognition. Our imaginary related to what we value and how we organise our economy, currently in a centralised system, needs to change to recognise non-monetary values of other-than-human and losses coming from, among others, their extraction.

Dani and Meredith brought up intimacy, brought in the content of their practices (see 4.1.1 The diversity of the practices) and relationships with the other-than-human that resemble romantic relationships between humans. Alina also referred to intimacy in “Hacer un pozo” and “baldio”, but it is not explicitly seen as a romantic, but rather a physically close and mindful way of being with other-than-human. Dani sees getting intimate with other beings as a way to trigger care and commitment to maintaining their existence and well-being. Dani is currently exploring what they call animist non-monogamy. The artist sees non-monogamy as “widening the sense of care”. When one considers a “river as one of their lovers”, the harm done to the river’s water is likely to trigger them viscerally and commit to preventing the harm. Meredith gave a task to her students to fall in love with an other-than-human. According to Meredith’s students, love requires time and attention and the way the students see the communication with their love-to-be is through touch.

Figure 5 Comparison of my and the artists’ definitions of post-extractivism.

Comparison of how I define post-extractivism and how the artists define it. Several artists proposed an attunement, involving intimacy and understanding interconnectedness between human and other-than-human bodies, as a method to develop post-extractivist imaginaries. In the brackets, I indicate which artist supported the

statement. The solid lines show connections the artists made between their own and my statements. The dashed lines indicate my speculated connections between mine and artists' definitions of extractivism.



4.3 Part 1 & Part 2 combined

To answer my first sub-question: *What elements of the artistic practices examined create the connection between embodiment and extractivist and post-extractivist imaginaries?* I compared my definition of post-/extractivist imaginaries with the definitions of the artists I interviewed and summarised them in **Figure 4** Comparison of my and the artists' definitions of extractivism. and **Figure 5** Comparison of my and the artists' definitions of post-extractivism. It is rather clear that the overlap in our definitions of extractivism can only be found when speaking of exploitation and commodification of the other-than-human. As far as the practice elements are concerned, the artists approached extractivism as an issue to be recognised through, for instance, meditation or self-reflection on one's actions, such as Meredith's realisation of the extractive nature of farming. Regarding post-extractivism, the only non-hypothetical connection can be seen when speaking about reciprocity, which was supported by particular practices, such as bringing back the soil to the soil extraction place. Within my results, I also recognised potential or indirect connections between our visions of post-/extractivist imaginaries (dashed lines in the figures), which I will revisit in the 5. Discussion.

Proceeding with my next research step, the embodiment workshop, I decided to incorporate in its design also the concepts that recurred in the interviews and the practices. I opted for

the methods of body scan and embodiment of the other-than-human and the concepts of intimacy and objectification of the other-than-human, in addition to reciprocity, exploitation and exhaustion.

4.4 *Part 3*: The embodiment workshop: can embodiment contribute to enabling post-extractivist imaginaries?

To understand whether the development of post-extractivist imaginaries could be facilitated through embodiment, I examined how the workshop participants responded to the introduced embodiment methods and what reflections the post-/extractivist concepts behind them evoked.

Overall, the practices I introduced during the workshop found resonance with the workshop participants. I noticed that they were responding to my prompts starting from the first exercise - the body scan. They were touching their bodies and changing their sitting or laying positions according to what felt comfortable. I got the impression that the participants were attentive to their bodily experiences and allowed themselves not to sit still like people are often expected to when attending classes or working in a professional setting. When embodying jellyfish, it was fascinating to see how some of the participants were jumping to the sides gesticulating their arms in a movement that resembled how jellyfish propel themselves with their bells. I had to be careful when moving around the space, as some of the people seemed to be quite immersed in their jellyfish experience and their movements were rather unexpected. One person put her scarf on her head to block her view and feel the floating of the fabric which brings to my mind the floating of the jellyfish in the water. As a facilitator, one of my bigger fears was that the participants would not feel comfortable or engaged enough to be interested in following the workshop till the end and to explore each exercise in their own way. I was positively surprised to see that, especially in the last exercise of breathing with a plant, it was enough for me to briefly introduce it for people to continue themselves. They chose to explore their relationship with the plant themselves, without my prompts. I have almost teared up watching how they looked at their plants, rocked them in their arms like babies or tangled the plant vines around their waists.

When reflecting on their experiences, the participants found the exercises calming and grounding. Participant 3 appreciated that by focusing on the body, she released the tension that built up coming from her thoughts.

The workshop triggered reflections on both the participants' relationships with themselves and with the other beings. Even though the majority of the content of the workshop was intended to address the relationship between the human and the other-than-human, we spent a large part of our discussion talking about our relationship with ourselves and our

bodies. The exercises I introduced appeared to be quite touching as one of the participants teared up.

Throughout the responses to the questionnaire, the participants kept mentioning that they usually do not feel embodied. They do not pay attention to the sensations in different parts of their bodies and overlook their discomfort and tiredness. Participants 3, 5 and 6 stressed that they realised that they take their bodies and their functioning for granted and do not appreciate them. Participants 1 and 6 found the body scan confronting, as they did not feel comfortable in their bodies, due to among others, self-judgement coming from poor body image. Yet, participant 1 realised that, to try to embody another body, she had to connect with her own body first.

“I was excited about this exercise, partly because it allowed me to ‘escape’ from my own body and inhabit a different being (since I feel somewhat uncomfortable inhabiting my own body, due to body image issues and physical discomforts). However, I quickly realised that in order to inhabit this other creature, I needed to first connect with my own body (and really try to feel in my own body what it would be like to exist in this wildly different body).”

Self-judgement was also evoked when building a relationship with a plant. Participant 5 tried looking at their pot plant partner without judging the fact that it was dusty and had some brown leaves and appreciated the plant the way it was. She felt as if the plant looked back at her and saw her the way she was. Similar to how masharu explained their dialogue with the other-than-human as a way to show an honest conversation with oneself, the participant saw herself through “plant’s eyes” and realised the degree of her self-criticism:

“I think that as we mend our relationships with ourselves and feel more connected to our bodies, we can also feel more connected with other human and non-human beings.” (Participant 5).

Listening to and reading through participants' reflections, I recognised two themes related to their relationship with other beings. What was mentioned by each of the participants was the interconnectedness between them and other beings around them. Some people notice or are reminded that in their day-to-day lives, they tend to see themselves as separate from their environment. Interestingly, some people linked the sense of detachment from the world around them to its exploitation. Participants 4 and 7 said respectively:

“I think it's easy to see myself as a separate entity and that mindset puts me in a position where it's easier to claim things.”

“It’s that “othering” and the detachment that allows humans to exploit the earth. If we always felt at one with it, we could not harm it without harming ourselves. Which is what we are doing, without being aware of it.”

The participants experienced their bodies as media to realise and understand the interconnectedness with their environment. Yet, their ideas of the connection varied. Some focused on the micro level, reflecting on the fact that our bodies are inhabited by for example bacteria in our guts that help us digest (participant 7). Participant 4 brought forward the Buddhist concept of inter-being when speaking of the circulation of matter and the possibility of exchanging the atoms that build our bodies with other beings. I see a similarity to the third layer of the body according to Dani as described above. Others (Participants 3, 4 and 7) spoke about the Earth and nature and the body as a whole being part of its environment:

“The interconnectedness of everything in existence, in “me” and outside of “myself”, challenges me to review how I am living and impacting this universe.” (Participant 7).

Participant 4 suggested that the negative self-talk some participants confessed to could be counteracted by thinking about “a beautiful place in nature and trying to imagine that it is in you”.

The second theme was unequal power dynamics between humans and the other-than-human, which reminds me of the negotiations with fungi in Victoria’s “Multispecies Choreography”. Several participants mentioned feeling uncomfortable, awkward and guilty when they were interacting with their potplant partners. They were struggling because they could not understand what plants wanted or needed. Participants 1, 2 and 6 were frustrated thinking that the plants, several being certainly not native to The Netherlands, were taken from their habitat and placed in pots. Participants 4 and 5 described such treatment of other beings as colonial.

“I thought about colonialism and power positions, and how it’s so easy for humans to take something and keep it for ourselves. This plant is not from this environment, but we humans took it and put it in a small pot so we can enjoy it. And the plant cannot do anything about it.” (Participant 5)

Alongside these realisations, the participants were trying to act upon them and find ways to overcome the power imbalance. On one hand, the workshop triggered them to think about themselves as not superior to other beings.

“Looking deeply into what the plant is made of, I can see we are made of the same parts. Water, air, carbon. We are both alive. We both breathe, grow, die. We share this earth.” (Participant 5)

Both, *becoming jellyfish* and *breathing with a plant* made them realise that their understanding of the other-than-human is rather limited. Some people found it challenging to see beyond the anthropocentric perspective, questioning if that is even possible. All the participants were trying to get to know their partners through touch, in the same way as described by Meredith (see 4.2.2 The artists’ visions of the shift from extractivism towards post-extractivism). Participant 1, however, almost refrained from touching the plant, as she was concerned about not knowing if she had the plant’s consent. Participant 2 was reluctant to move away from his plant, thinking that it was unfair that he could do it, while the plant could not move away by itself from where it was placed.

In their reflections, each participant described a different practice they would like to incorporate in their daily lives. People felt inspired to be mindful of their bodies and the work their bodies do. Participants 4 and 5 mentioned seeking a community within which they could explore such practices more often.

Regarding the ideas related to post-extractivism, participant 2 expressed a wish to experiment with embodying the other-than-human to shift his perspective to a less anthropocentric one. Participants 1, 6 and 7 wanted to be more mindful, grateful and respectful of the other-than-human hoping to be able to understand what the beings around them try to communicate and recognise their agency.

4.5 Embodiment for post-extractivist imaginaries: a reasonable proposition?

With Part 3, supported by the results from Part 1 and 2, I aimed to answer my second sub-question: *What influence embodiment with post-extractivist features can have on people’s imaginaries?* Reading through the reflections of the workshop participants, it was rather clear to me that the embodiment exercises made the participants think about the exploitation of the other-than-human, reflecting on their own behaviour and behaviour of people in general, and triggering them to try acting otherwise. It was apparent that their reflections on the sense of detachment from the world around them and on how people exercise the unequal power dynamics between humans and the other-than-human for their own benefit link directly to how my interviewees understand extractivism and the literature I supported my research with (see 4.2 *Part 2: Towards post-extractivism*).

I performed only one workshop and could not examine either the impact it had on people in the long term or whether the participants' conclusions were reflected in their actions. Thus, it is rather hard for me to what extent the imaginaries of the participants have changed after the workshop. However, the participants expressed the desire to engage with such practices more often, or even regularly.

The main research question that guided my thesis was: *How can artful embodiment contribute to enabling post-extractivist imaginaries in the context of Western Europe?* Bringing together all of my results, embodiment offers methods, such as embodied meditation or touch to explore and experience the interconnectedness between humans and other beings. The embodiment can also encourage dialogue with the other-than-human, through movement and again touch or taste, and imagine the world through perspectives other than human-centred. In the experience of my interviewees and workshop participants such experiences were lacking in the parts of the West they are familiar with, which in their view linked to extractivism. Based on my small study, it appears that in my local context, embodiment has the potential to encourage non-exploitative and reciprocal relationships between the human and the other-than-human by triggering a sense of interconnectedness between humans and other beings and incorporating other-than-human perspectives in people's imaginaries.

5. Discussion

Taking a step back from all the details of my results, I outline my contributions to the discourse on post-/extractivism and some practical suggestions of how embodiment can be practised to communicate post-extractivist ideals. Being aware of the limitations of my research design and several mistakes that I made along the way, I reflected on my methodology in the light of art-informed research and embodiment, my personal experience of performing this research and the impact of my positionality on my results. I also explained how my findings relate to post-humanism, post-anthropocentrism and queer ecology since they appear to be relevant to my results and I end the section with suggestions for further research.

5.1 Post-/extractivist discourse

I contributed the following to the discourse on post-extractivism: the definitions of post-/extractivist imaginaries based on the concepts of exploitation, exhaustion, regeneration and reciprocity and personal views of the artistic embodiment practitioners on extractivism and their ideas of how post-extractivist imaginaries could be enabled through embodiment.

As I mentioned beforehand, extractivism can be defined in different ways. Some definitions concentrate on the physical aspect of the extraction of resources, while others broaden their understanding to mean a whole economic system that depends on the exploitation of people and resources or a narrative of the exploitation of other beings (Schaffartzik & Pichler, 2017, p. 38; Acosta, 2013, p. 81-82; Nygren, Kröger & Gills, 2022, p. 735). Post-extractivism is often defined as a reduction of the extraction of material resources from the environment and the holistic approach to human/other-than-human relationships that recognises their interdependence (Acosta, 2017, p. 15; Gudynas, 2013, p. 165; Svampa, 2019, p. 44). In my research, I added two contributions to the discussion on post-extractivism. My research added the definition of post-/extractivism, based on the literature (see 2.Theoretical Framework), that describes extractivism as an imaginary characterised by exploitation and non-reciprocal relationship with the other-than-human often leading to their exploitation. I characterised post-extractivism as going beyond extractivism and enacting reciprocal, non-exploitative and regenerative relationships with other-than-human living and non-living beings. My definition found resonance among my interviewees. Yet, I believe it is important for me to reflect on the limitations of my definition of post-/extractivist imaginaries.

To begin with, the three elements - exploitation, lack of reciprocity and exhaustion in extractivism and non-exploitation, reciprocity and regeneration in post-extractivism - intertwine with each other. Reckless exploitation leads to exhaustion and exhaustion means unreparable destruction (Toscano, 2018, p. 7-8). Thus, one could argue that non-exploitative treatment of the other-than-human already safeguards them from ruination. Reciprocity can also stimulate sharing and use of fewer resources possibly contributing to lowering the need for extraction (Pickerill in Kirwan et al., 2015, p. 50). Yet, as I mentioned before, I do not think people can avoid extraction and exploitation altogether. It is likely, not possible to create a completely balanced chain of reciprocal relationships that would ensure that each shortfall is replenished. Therefore, I believe it is important to be cautious of exhaustion.

Regarding reciprocity, my definition is more closely related to what Weber describes later on as “an ethics of the gift, (...) [which] requires a commitment to the other, modesty, and the rejection of ego-centredness.” (Weber, 2020, p. 100). I can imagine it is rather idealistic and possibly even risky to simply advocate for selflessness in a world in which inequality and violence exist (Korzeniewicz & Albrecht, 2012, p. 420). It would be advisable to include in my definition an element of a critical reflection on people’s capacities to enact reciprocity without harming themselves.

I also see a limitation in my definition of regeneration that assumes that people should in the first place appreciate the capacity of the other-than-human to self-heal. However, van der Zaan & van ‘t Hof (in Roggema, 2022, p. 175) brought up cases of degradation of ecosystems that may require active regeneration projects to prevent the irreversible destruction of the biodiversity in the degraded ecosystems and help to reduce greenhouse gases concentrations in the air to act upon global warming. The authors proposed so-called

nature-based solutions, such as forest restorations, which I possibly should have included in my definition (ibid.).

Finally, I would like to return to the question of to what extent each characteristic of post-extractivism can be enacted. I can imagine that one could refrain from exploitation but not pay attention to reciprocity. As pointed out by Dani, it is far too big of a task to try to create the post-extractivist world. We can only move *towards* post-extractivism and I appreciate any effort that takes us further on the journey.

The second contribution added the personal views of artists on post-/extractivism. I believe this research added to the cultural and anthropological perspective on post-/extractivism relevant to the Western context. Moreover, during the interviews, I had a chance to collate my literature-based definitions of post-/extractivist imaginaries with how the artists define them.

My interviewees linked extractivism to a lack of care for the well-being and objectification of the other-than-human as well as unequal power dynamics between the human and the other-than-human. Overall, all these issues have been further linked by my interviewees to capitalism and its anthropocentric character which encourages the accumulation of material goods and wealth (Chatterton & Pusey, 2019, p. 29; Haraway, 2007, p. 45). Comparing our definitions, it appeared to me that my interpretation of post-/extractivist imaginaries was rather narrow or focused too much on the change in actions disregarding what would need to change in how people think of the other-than-human. My understanding of post-/extractivism also did not refer directly to the original, possibly integral ties to economic and political systems in the West, very much present in the views of my interviewees and the existing post-/extractivism literature (see 1.2 Previous research). I wonder whether my definitions should be expanded to include the ideas about interconnectedness and reference to economics and politics. My definitions found resonance among the artists. Thus, the lack of direct overlap in how we define these concepts might be an indication that I have failed to enquire how exactly the artists connect their ideas with mine. However, it was rather evident that what the artists considered problematic about capitalism - accumulation of wealth, commodification of other-than-human beings - connects to the extractivist mentality. As stated by Victoria (see 4.2.1 Extractivism), extractivism enables commodification and exploitation of the other-than-human to provide surplus value and enable the accumulation of wealth.

In my interpretation (see **Figure 4** Comparison of my and the artists' definitions of extractivism. and **Figure 5** Comparison of my and the artists' definitions of post-extractivism.), what masharu called a "mindset of getting something out of everything" relates to exploitation and indicates a one-sided perspective contrasting with reciprocity. In the context of the

interview, Dani's remark about people's expectation of being continuously supported by the other-than-human could suggest that, in the artist's view, the other-than-human do not exist to be exploited by humans and that their capacities to support humans are limited and should not be exhausted. The "slow time" Meredith and Alina referred to points towards regeneration since consistent attentiveness to other beings could potentially help to recognise their needs and when they require time to recover. Finally, dialogue that other artists brought up, as explained by Victoria (see 4.2.2 The artists' visions of the shift from extractivism towards post-extractivism) assumes exchange and could be considered a practice of reciprocity.

Since I investigated post-/extractivist imaginaries in the Western context specifically, it is worth mentioning, however, people's imaginaries are not necessarily bound to geographical location (Strauss, 2006, p. 323). My literature research and results showed that people in the West seek inspiration from non-Western traditions, such as Buddhism or indigenous knowledges to develop post-extractivist imaginaries. The way masharu practices reciprocity or Meredith attunes to the land is rooted in indigenous practices. The research and practice of Dani and Victoria are based on decolonial thought and research in Latin America. Though influenced by the choice of interviewees, it seems that Western traditions do not suffice. It is important to keep in mind the potential appropriation and knowledge extractivism (Kouritzin & Nakagawa, 2018, p. 683).

5.3 Further knowledge advancement

In this section, I reflect on the embodiment practices I explored and some of their features, such as engagement with soil. I also explain how my research contributed to other ways of knowing, such as embodied and emotional, that are key aspects of art-informed research (Cole & Knowles, 2011, p. 123-124).

To begin with, I must admit that I was worried that a sample of six artists would fall short of showing a variety of forms of embodied approaches to post-/extractivism. Even though it could be seen within the practices I explored that several artists had a preference for a particular way of engaging with the body and communicating the content of their works. In both "Co-sensing..." and "consistency" Dani used earth to rid of their identity. In "Multispecies Choreography", Victoria focused on movement, since the artist sees it as one of the ways to activate the body and open it up to sense and observe its environment. I was excited to explore the details of each practice and their, occasionally overwhelming, conceptual richness. Each practice could be a separate research topic.

Through this research, I expanded the existing connection, created in the practice *cuerpo territorio*, of post-/extractivism and embodiment (Zaragocin & Caretta, 2020, p. 1504). The practices of the artists interviewed engaged with the body in various ways - through

movement, meditation or earth eating. Interestingly, *cuervo territorio* seems to assume the unity of the body and the land, while the practices I examined seek to (re-)construct the sense of connection between the body and its surroundings (ibid.). This observation made me wonder whether the cultural origins of the practices played a role in it. *Cuerpo territorio* originated in Latin America from the resistance of ingenious people, women in particular, against extractivism (Caretta et al., 2020, p. 51). Zaragocin & Caretta (2020, p. 1504) contrast the ontological foundation of *cuervo territorio*, which assumes the unity of the body and the land, with the Western geographical conception of the territory.

Interestingly, the theme of land, earth or soil was rather prominent in the both content and the form of the embodiment practices I examined (see 4.1.1 The diversity of the practices). The practice of masharu revolves around earth, while for Meredith by attuning to the land one can realise their interconnectedness with other beings. For Meredith, the discussion about land is relevant to settler colonialism in North America, similar to *cuervo territorio* (Zaragocin & Caretta, 2021, p. 1512). The artist, however, incorporates an indigenous worldview in how she understands the land, which does not only mean soil but also everything in and above it - sky, water, plants etc. It opened my eyes to the limitations of my imagination

Meredith and masharu have also more personal reasons for engaging with soil and land. Both artists referred to the feeling of groundedness when touching or eating earth.

Alongside theoretical knowledge on post-/extractivism, I explored the embodied and emotional ways of knowing. The embodied practices of the artists and in my workshop linked different concepts, such as capitalism, to the bodily experiences of the artists or the audience. My interviewees and workshop participants developed particular corporeal actions, which in their view meant enacting post-extractivism, such as placing some soil in a particular place as an act of reciprocity with earth. Though hard, if not impossible to prove, the practices have likely contributed to the embodied knowledge of these concepts (Ignatow, 2007, p. 125). In addition, through such embodied acts one can bridge the gap between knowledge and action (Kemmis & Mutton, 2012, p. 189). I consider it an important addition to the knowledge on post-/extractivism since my research is concerned with a change of imaginaries that manifests itself not only as a change of mindset but also as a change in people's actions. Further, the exercises in the workshop also triggered emotions and feelings such as guilt or embarrassment linking them to extractivism. Thus, the exercises potentially contributed to an emotional knowledge of extractivism, which has the potential to encourage acting upon the issue (Huang & Yore, 2005, p. 444).

5.3 Embodiment under a question mark and other methodological limitations

Despite the insights described above (3.3 Methodological Design Limitations), I identified some limitations when applying embodiment as a method to enable post-extractivism imaginaries. I distinguish between the following types of limitations: from the experimental and explorative nature of my research to my data saturation and reliability.

Addressing the exploratory nature of my research, after examining the reflections of the workshop participants, I initially thought that embodiment might not be the most suitable path to enable and practice post-extractivist ways of being. To begin with, the participants realised the difficulties of their relationships with themselves and their bodies. It was truly heartbreaking for me to hear that for example people wanted to become jellyfish, so they could have a break from being themselves and facing their insecurities. It made me wonder whether other changes need to happen before people can turn to embodiment to enable post-extractivist imaginaries.

However, I returned to the conversation with Victoria, who sees a distinction between one's well-being from the well-being of others, as a symptom of individualism common in Western societies, which promotes independence, self-sufficiency, pursuing personal goals and exercising individual freedom (Santos, Varnum & Grossmann, 2017, p. 1229; Humphrey & Bliuc, 2021, p. 2). Some scholars argue that, on one hand, individualism emancipated people from the pressures of particular ideologies of traditional lifestyles and societal norms (Turcan, 2018, p. 3). On the other hand, individualism brought forward a desire, but also pressure and competition to achieve self-realisation and increased levels of self-isolation (Turcan, 2018, p. 3; Humphrey & Bliuc, 2021, p. 2).

Perhaps, there is no right order between engaging with embodiment as a method to explore post-/extractivism and to change people's relationships with themselves. Further, Dani's "Co-sensing..." suggests: "Interrupt desires for protagonism, futurity, and legacy", inviting the audience to see beyond their ego (Gesturing Towards Decolonial Futures, n.d.). Some literature argues that collectivism and relationality, opposing individualism, facilitate more sustainable ways of living that recognise the needs of other humans and other-than-human beings (Miller in McIntyre-Mills, Romm & Corcoran-Nantes, 2017, p. 201). However, it is beyond the scope of this research to deliberate whether individualism should be opposed altogether.

The self-oriented reflections of the workshop participants made me think of the concept of self-exploitation. During the workshop, people noticed the tiredness of their bodies and the labour their bodies do daily that they do not appreciate. Meredith's "Unsettling the Settler" is largely about how capitalism forces people to exploit themselves. The phenomenon of self-exploitation was recognised in the literature also in the context of Community-based

agriculture (Galt, 2013, p. 346). In that case study, Galt recognised that people tend to undervalue their labour and sacrifice their profit for the sake of resisting capitalist farming practices (ibid., p. 347).

I believe it could be interesting to examine if a post-extractivist attitude towards the other-than-human, which in my definition assumes non-exploitative, reciprocal, regenerative relationships with them, combined with a sense of interconnectedness with them, could lead to less self-exploitation among people. The statement of participant 1 said that one needs to be connected to oneself first to connect with others. Does the described order necessarily apply? The practices I designed did not stimulate an interaction between participants. Further, *body scan* quite likely made the participants focus in the first place on their experiences in their bodies. I wonder whether an interactive exercise, similar to for example Victoria's "Attunement", in which people need to attune to one another to be able to move collectively through space, could trigger less self-oriented reflections (McKenzie, n.d.).

Concerning people's reflections on post-/extractivism and the other-than-human, it appears to me that the workshop in the first place made the participants aware of their extractivist behaviour towards other beings. For example, people realised that they tend to unconsciously appropriate and exploit the other-than-human. Further, the participants seemed to be overwhelmed by feelings of discomfort, guilt and awkwardness when becoming aware of their extractivist approaches. I wonder whether I introduced the idea of practising post-extractivism too early. It could be a valuable addition to the research to give people time to process these realisations and come to their own conclusions. I would be curious to find out how the participants would envision a desired change without my suggestions. It would be a possibility to make my research more participatory and relevant to my local context.

Besides the limitations of my methodological design mentioned in the Methodology section, other shortcomings appeared throughout my research. I performed only eight interviews out of which six were relevant for this study. The remaining two interviews were missing the reference to the post-/extractivism concerning the other-than-human. Further, I managed to get in contact with mostly female or non-binary artists. Only one male-identifying artist responded to my interview request. The number of people who attended my workshop was seven, even fewer than my assumed capacity of ten. Again, there were mostly women among the workshop participants - five female-identifying and two male-identifying participants. These limitations lowered the diversity of my sample and made it more difficult to observe recurring reflections especially when examining the impressions of the workshop. Yet, I consider my research as sound and informative as an explorative study. As mentioned above I managed to present a diversity of the embodiment practice regarding both their form and content that relate to post-/extractivism. Further, a limited number of workshop participants enabled each of them to share their impressions immediately after the workshop and helped to create a safe space, in which the participants were comfortable

to be open about their feelings and personal stories, relevant to my research. Overall, I managed to gain some insights on post-/extractivism and how it can be informed with embodiment and my findings could be relevant for future research on the topic.

Finally, some of the exercises I designed are possibly problematic in light of my research content. I used potplants as tools for my workshop and to be honest, my choice of the particular plants was rather mechanic and not very considerate of the plants. It would be fair to call it an exploitation and an exercise of my power over the plants. My research aimed to find ways to practice non-exploitative ways of treating the other-than-human and recognising their agency. Yet, as stressed by Dani (see 4.2.1 Extractivism), perfection is impossible to achieve. Further, I believe it is important to address the anthropomorphisation of the other-than-human relevant to both the researched embodiment practices and my embodiment workshop. The idea of having a dialogue with for example fungi or earth or considering whether a potplant consents to be touched hints at projecting human features and action on the other-than-human (Price & Chao, 2023, p. 187). Participant 5 pointed out that she was tempted to name her plant and saw this impulse as a, to her, problematic urge to anthropomorphise other beings. Taking a broader perspective, some non-Western and indigenous cultures believe that the human and the other-than-human share certain traits (ibid.). The recognition of the personhood of for example Ganges River in India supported its environmental protection (Conty, 2022, p. 146). The river was recognised as a legal entity with human rights thus it could defend itself in court against human-induced damage and pollution (ibid.). However, what Price & Chao (2023, p. 187) recognise as problematic about anthropomorphisation, especially in the context of a culture dominated by anthropocentrism, is accompanied by value hierarchies between humans and other-than-human beings. It could perpetuate a human-centred worldview by giving recognition and equal treatment to human-like beings.

5.4 My experience, positionality and transparency as a researcher

Considering that my research was an attempt to overcome certain dichotomies, such as body-mind dualism, I consider it necessary to reflect on whether I succeeded. Further, I elaborated on my biases and difficulties with embracing art-informed research methodology.

To begin with, I want to address the dualisms that I tried to overcome in my research, yet did not quite succeed. Throughout the text, I distinguish quite clearly between the Western culture and other cultures, which I claim to be more in dialogue with the other-than-human

based on the literature and my fieldwork (Escobar, 2015, p. 15; Krimmerer, 2013, p. 38-40). My interviewees underlined this distinction.

The body-mind dualism that was at the core of my research seemed to be relevant to the daily experiences of the workshop participants. For me as well, feeling embodied is limited to the occasional practice of embodiment. Recently, my practice has been tainted with a productive mindset, as I could not help thinking about what I could incorporate in my workshop to improve it instead of being present in the experience.

When preparing for the workshop, I struggled with believing in the validity and academic legitimacy of my research. Growing up in a provincial Poland where job insecurity was rather high, especially in the cultural sector, it was common for me to hear that developments in science, medicine or law are more valuable than art. Cultural studies or humanities in general were considered less difficult and to be taken less seriously, as their statements could not be objectively proven and possibly even redundant if one thinks of them as something people engage with for leisure.

This experience, however, is nothing new or exceptional. Both feminist critiques of science and art-informed research discourse have been challenging logical empiricism and scientific objectivity (Haraway, 1988, p. 581; Cole & Knowles, 2011, p. 121). Costa (2019, p. 2) observed a general trend of devaluation and shrinking of the academic research in humanities and its negative consequences such as the loss of skills the humanities require, e.g. critical thinking and open-mindedness. As argued by Costa (2019, p. 2), I do not attempt to show the superiority of art-informed research over other types of scientific inquiry. I would rather hope for recognition of all of them, as well as a recognition of different knowledge and ways of knowing - rational, emotional or embodied (Cole & Knowles, 2011, p. 121). Barad (2007, p. 185) argued that there is an implication between how we know and how we are, which is addressed through the multiple ways of knowing that art can stimulate (Cole & Knowles, 2011, p. 123-124).

Throughout this thesis, I tried to make myself visible as a researcher by incorporating my experiences in the text and indicating which statements are my interpretation of the literature and my results (Cole & Knowles, 2011, p. 123-124). Yet, I have a background in science and it was the first time I performed art-informed research. I admit that I felt rather uncomfortable using direct speech and sharing my thoughts, thinking that would make my research too personal and subjective as if it is not already.

I am concerned with the communicability of this report. I have very little experience with handling the abstraction of the academic and artistic content of this research. I believe further practice would allow me to learn to write about art in a language sharp enough to convey its message yet not overwrite with words, maintaining its abstraction and freedom of interpretation as art scholars suggest (Seregina, 2020, p. 10).

5.5 Connection to other discourses and suggestions for further research

Closing the Discussion section, I would like to mention a few academic discourses other than post-/extractivism, i.e. queer ecology, post-humanism and multi-species justice, that appeared to be relevant to my results. It could be a suggestion for further research on post-/extractivism to incorporate some of them in the theoretical framework.

Some of the artists referred to the practices of theirs that could be relevant to the discourse on queer ecology, post-humanism. Regarding queer ecology, Morton (2010, p. 274) argued that ecology is inherently intimate. Further, the concept includes the idea of non-heteronormative erotics, which are “not genital, not geared to ideologies about where the body stops and starts” (Morton, 2010, p. 280). Meredith’s exercise of falling in love with an other-than-human or Dani’s idea of animist non-monogamy, the four-layer understanding of the body and a suggestion for a switch from seeing the earth not as one’s body, but one’s body as the earth express similarities to the discourse on queer ecology. In addition, chrononormativity mentioned by Meredith (see 4.1.1 The diversity of the practices) or fluidity explored by Alina in “Hacer un pozo” relates to the concept of queerness. I believe it could be worthwhile to explore in more detail how queer ecology-related concepts could contribute to post-extractivist imaginaries.

Another strand of literature that relates to my research is post-humanism, which does not recognise humans and their identity as separate from other beings and stresses that the human being includes other-than-human forms of life (Valera, 2014, p. 483). In her article, Ferrnado (p. 161) supports the statements of human dependence on other living and non-living beings. The author expands the notion of the body - the human body, inhabited by other bodies such as bacteria being a part of Earth’s larger cosmic body (ibid., p. 162). “Co-Sensing....” by Dani and eating earth by masharu explored the ideas of humans being not only as humans. Or in the words of Peruvian anthropologist, Marisol de la Cadena (2014, p. 256): “humans, but not only”. In “consistency” Dani tried to rid of their identity as a starting point to blend into the larger body of Earth. Again, post-extractivist discourse could benefit from an academic exploration of how post-extractivist imaginaries could be supported by post-humanist ideas.

Looking from an even broader perspective, post-extractivism is an important issue when speaking of Multispecies Justice (Celermajer, 2020, p. 498). The extractivism of natural resources is unjust to the other-than-humans who are exploited as commodities (ibid., p. 497). However, the use of the other-than-human to advance human knowledge was recognised as extractivist (ibid., p. 495). Some authors, such as Celermajer et al. (2020, p. 506) and Latour (2004, p. 218) propose engaging with senses, emotions, imagination and affect to

shift from unjust extraction to “a humble and exploratory knowing”. I intended to stimulate such an approach among my workshop participants when building relationships with their potplant partners. Based on my observation of the participants’ actions during the exercise and their verbal and written reflections, I believe I succeeded. As mentioned in the results the sense of touch was important when getting to know their plants. Participants also seemed to be humbled by their plants, as one of them wondered if the plant would like to get to know someone like them.

6. Conclusion

My research was rather experimental and exploratory, laying the ground for further research on post-/extractivist imaginaries. As stated by Dani d’Emilia, it is yet too early to think of becoming a post-extractivist society. For now, we are only starting our journey *towards* post-extractivism.

With this research, I intended to explore *How artful embodiment can contribute to enabling post-extractivist imaginaries in the context of Western Europe*. Based on my results, I concluded that in my local context, the artistic embodiment practices I researched and developed could facilitate the development of post-extractivist imaginaries. Addressing the *how*, the artists proposed dialogue and attunement through touch, intimacy and embodying the other-than-human as methods. My definition of post-/extractivist imaginaries, though it found resonance among the artists I interviewed, proved to be rather specific. This definition focused on particular attitudes and activities I imagined are crucial to shift people’s behaviour towards the post-extractivist, i.e. building reciprocal, regenerative and non-exploitative relationships with other-than-human. The results showed that other aspects, possibly motivating such relationships, should be considered in the definition, such as a feeling of interconnectedness and care for the other-than-human and power dynamics between the human and the other-than-human.

Even though my study was placed in a very particular context and my results are not generalisable, my findings give some insights into how artists associated with the Western culture practice embodiment and relate their practices to post-/extractivism. Further research could build on my results by for instance expanding my definitions of post-/extractivist imaginaries to include notions of capitalist wealth accumulation or the lens of queer ecology.

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8. Appendices

8.2 Appendix 1

The workshop invitation message:

Hello,

My name is Julia and I'm a Sustainable Development Master's student at UU. I'm currently writing my Master's thesis, in which I'm exploring how embodiment practices can help us move towards non-extractive ways of being.

I'm looking for volunteers, who would like to join my workshop and try out a few embodiment practices that I've learnt. The workshop will take place on the 3rd of November, between 14:30 and 16:30, at Centrum EMMA (Cremerstraat 245/247, 3532 BJ Utrecht).

None of the practices requires any particular skills or knowledge or a level of fitness. In the case of a guided movement exercise, it is merely an invitation for you to try what I suggest. You are very welcome to modify or skip my instructions.

At the end, I would like to ask you to fill in a short questionnaire.

There will be drinks and snacks available for you.

To sign up, please, fill in this form:

https://docs.google.com/forms/d/e/1FAIpQLSclIkR6W6zLP09F44_V7w2r6IArPfEeuI0DmoxXrAKB5PzNg/viewform?usp=sf_link

I hope to see you there and if you have any questions, don't hesitate to contact me (j.s.kassyk@students.uu.nl or +48 517 246 956).

*Best,
Julia*

8.2 Appendix 2

8.2.1 Script

Introduction

Hi everyone!

I'm Julia and I'm doing my Master's in Sustainable Development at UU. I invited you here for my workshop, which is about embodiment and post-extractivism.

Thank you so much for being here. I really appreciate your time, your energy and your being that you were willing to share with me and others here.

Before we get into any content, it would be nice if we introduce ourselves to each other. We can do a round, saying your name (can be a nickname, a fake name, a name you always wanted to have), and pronouns and if you were to become a food, what would you be?

So, this workshop is part of my master's thesis project. I did some nice fieldwork, in which I interviewed artists, went to workshops and generally researched some embodiment techniques, which relate to more sustainable ways of living. It was very artistic and sth that resonated a lot with me. Quite a few of them had quite a profound impact on the way I look at my own actions and the actions of mankind and me as a part of it. Considering that art is often not really data, it's rather a qualitative endeavour, I thought it would be nice to share it with you and see how you feel about it. And if what I've researched has maybe some potential to be used as a way to learn and practice more sustainable ways of being and allowing others to live more sustainably.

[Sustainability is a broad term. What I recently found particularly interesting is a non-exploitative approach towards ourselves and other beings, be they living or non-living, human or non-human. I'm trying to explore how we can develop a mindset, in which instead of pushing everything and everyone, including ourselves, to their limits and wanting the most out of everything, we understand that everyone and everything have their limits and make space for rest and care. It's autumn. I don't know if you guys have ever been foraging, but if you pick mushrooms, you should leave a part of its stalk (the leg) in the ground, so a new mushroom can grow back out of it. I also think that it's important to understand that now everything out there is for us, waiting to be taken. It takes time and labour for the plants to grow. It takes time and labour to make your phone. And I wonder how we can not take these things for granted and think what is that we can give in return.]

So, I prepared 3 exercises. After the exercises I prepared, I invite you to have a short discussion and to fill in a short questionnaire. As mentioned in the consent form, I'll anonymise your answers and the recording will not be shared.

Before I introduce what I've prepared, do you have any questions about it? Anything to specify?

We'll do 3 exercises:

- body scan
- embodying a jellyfish
- breathing with a plant

Everything is an invitation

I'll guide you, but please feel free to alter or ignore what I say. You're more than welcome to adjust what you do to how you feel today, what you feel like doing, what your body enables you to do or how it feels like doing.

There's no judgment, no pressure to perform. There'll be no pictures or videos taken.

There's a rest space on the left. If at any point, you feel like you have too much for today, feel free to use it. We'll have breaks between the exercises and snacks and drinks if anyone would like anything. Please, help yourself.

Do you have any questions at this point?

Part 1 [22 min]: The body scan

[[music](#)]

It will resemble a guided meditation. But we will put a strong focus on the embodied aspect of it. In the first exercise, you are welcome to stand, sit or lie down. I will invite you to move or touch a few different parts of your body, but you can do it in any position. In general, let your body be ungoverned. Let it do what it wants. There's no right or wrong. You can keep your eyes open or closed or sth in between. However, you like.

First, take a few breaths.

- first, feel the weight of your body
 - feel the gravity pulling you gently down to the ground
 - let gravity ground you in the place you are in now
 - feel the stability and the safety of the stable ground under your body and how it doesn't allow you to be carried away in space

- *We were born and raised with particular narratives and stories passed to us with words, no-words, gestures and doings and no-doings. I myself struggle even to think how it could be otherwise. Can we think otherwise? Can we be otherwise? Can we be otherwise with each other? Can we not be?*

Western philosophical tradition distinguishes body and mind. Modern culture tries to bring them back together and approach one holistically through mindfulness, yoga or different practices. I find myself being in neither my mind nor my body or mind-body or body-mind. Instead, floating somewhere in the realm of intellectual thoughts (not sure whose), images and sounds from close and distant places and physical environments that I'm quite likely part of. For today, I thought it could be interesting to see how we could be (a bit) different than usual. I've met some people who try the otherwise and was thinking I could share what they've taught me.

- I would like to first invite you to scan our bodies together and see how we feel things
- please, take a comfortable position. You are welcome to sit, stand or lay down.
- let's start with our feet

Feet

- If that's okay with you, please take your shoes off
- Now direct your attention to your feet. You can look at them. Wiggle your toes. As you breathe, think about the breath going into your feet.
- Feel free to touch your feet with your hands
 - how are they feeling? How do they feel from the inside? And what do you sense from the outside?
 - What did your feet do today?
 - Where did they take you and why?
 - What do they usually feel? Do they like wearing shoes and socks?

- Do they ever tell you that they had enough of whatever they are doing? Do you know how to listen? Could you afford to listen?
- How about you pause now and ask yourself why they feel the way they feel?
[PAUSE]
- In the summer months, they may feel freer when you walk barefoot on the beach or on the grass somewhere. How does it feel? How does it feel to feel what you walk on?
 - What does it do to where you go? Do you pick wet or dry sand on the beach to walk on?
What about the sitting? Do you pick the soft or the spiky spot on the grass? Do you pick it or does it pick you? What is your relationship with the place where you sit? Do you ever ask the place if you can sit in it? I never do actually. I keep forgetting that it existed before and will exist after me in one form or another regardless of whether I've ever been there or not. And that it was not made for me. And that it did not start existing for me. Nor did other people or other beings.
 - let's move to our legs

Legs

- How are they feeling?
- Feel free to touch them. Give your calves a little massage. Rub your knees. You can also look at them, and scan from feet to your hips and back.
- Why do you move them in your everyday life? For whom do you move them?
- And what about sitting? Or standing? Why do they sit? Why do they stand? For whom do they do it?
- Who has the ultimate agency over them?
- Remember a time when you went for a swim, your legs were standing in the water? You felt it on every piece of your skin. How did it feel? What did you think about the water? Were you grateful for it to be there? I quite often need to remember to be. I'm grateful for the moment with friends or alone that I spend near to the water. I'm grateful for the sensation it gives me. Again, as if it exists for me. For my own use. I forget it is its own body. Enormous body, made of small droplets, paddles, and water molecules in your blood. It is interesting, some say that all the matter that is in this world doesn't disappear when something dies or falls apart. It circulates in the system we live in. Carried by water, wind, explosions, animals or people. The flood in Libya 2 months ago. The water molecules it carried, might have been brought here with clouds, landed on your lips as a raindrop and then gone through your body. Or they are still in it. One could say, we are the flood (Sullivan, 2012, p. 307-309).
- now, move your attention up to your belly

Bellies

- How is your belly feeling?

- Would you like to put your hand on it? It is a bit of a sensitive part, so please, don't force anything. It is the soft part. That's where many people feel the stress.
- Can you loosen it? Let it sink into your back. Or slide down your front body. It doesn't matter how it looks. It is the diet culture that tells you it should be like this or like that, flat or muscular. And some people make a lot of money on that. On selling us ideas on how we should be and how to get there as soon as possible. They exploit our insecurities.
- Back to our bellies. It is your centre, your core. Actually, a point a bit above your belly button is the weight centre of your body. At the beginning, we felt the gravity. One of the artists I interviewed talks about this spot as the source of groundedness. As if there is an invisible umbilical cord that connects that point and the ground under your feet. A point you can come back to when feeling unsafe, unstable or out of balance.
- Let's get back to the belly itself. Can you touch it? Give it a loving rub. This is where your energy comes from. From food that gets digested there. It usually stays quite warm, right? You can feel it when you touch it. Can you vocalise this warmth?
- Food is a gift. Not everyone has it. I was thinking the other day, that if I were to thank in person everyone who contributed to me eating the breakfast I eat every day, it's quite likely it would take weeks if not months and possibly a couple of flights to get to them. I'm sure they are exploited also. And the environment that the food grows in is exploited. And I don't even remember to be grateful for the food I get. Maybe if I look at it as a gift, that will help. Maybe, in the chaos of life, I will even at some point feel like giving something back for what I get.
- Now, let's move to the upper part of your body.

Chest and shoulders

- How is your chest? How are your shoulders and your neck?
- Let your shoulders drop down towards your hips and let your chest open. Feel free to do a little shimmy if you are standing or sitting.
- You may feel your arm with your opposite hand. Give your joints a little massage. Put your hand on your shoulder close to your neck. How does this part feel?
- Now, slide down onto your heart. And feel it beating. Pumping the blood through more than 96,000 km of your blood vessels (British Heart Foundation, n.d.). Every adrenaline rush or speeding on your bike makes it pump even faster. And it never takes a real break.
- I'm touching my shoulders, and I wonder how much did your shoulders carry today? Did they carry anything in particular? Where and for what were they carrying it?
- Quite often I find myself carrying a lot of stuff. My laptop, my lunch, filled water bottle, groceries, clothes for sports in the evening and anything else that I pick up as I go through my day.

- But then, if I actually think about it. It's like, my laptop for example. It carries the whole world in itself. I can open it and see what's happening in Japan or Alaska. And it's made of things that are heavy. Imagine the labour required to extract the ore that is later processed in a processing plant so some factory can get the lithium out of it and make it into part of your laptop. Can you imagine how heavy the mining process must be? When I looked up the pictures of how people mine, it seemed unbelievable that people still do such labour. Buckets full of rocks and gravel. Bare hands carry them to the collection spot. Dust everywhere. And then I asked myself, how much does my laptop weigh? A lot? Or not that much actually? How much does my consumption weigh? And how much of it do *my* shoulders feel?

Head

- It might be a bit hard to feel it. I mean, it's hard to feel it as flesh only. That's where the thinking happens, right? It's the hard part of your body. I always imagine the brain to be very dense. And heavy.
- Our heads are where our senses are located. Our vision, hearing, smell, taste. Every day, we look at, hear, taste and sniff so many things. It's maybe a bit cheesy, but you know what some people say: we often just hear, but not really listen. We look but don't see. Ofc, we can't see it all. It would be way too much to handle. But I sometimes find myself not even seeing what I care to see. Do I even know how to look? Do I know how to sharpen my look when I need to?
 - I invite you to open your eyes and look at what's in front of you. cover one with your hand, put the finger of the other hand in front of you, move it around and follow your finger with your eye [same other eye]. Notice the work it is doing.
I often take my senses for granted. Only, when my eyesight started getting worse did I become conscious of how much I depend on them. but I still don't have a habit of allowing them to rest. I sleep too little. I don't even consider just lying down with my eyes closed without the intention to go to sleep or give my whole body a break, just to let them rest.
- We've travelled from the bottom to the top (or from one side to the other). Let's get back for a minute to feel the gravity. Now, you can try to feel it with the whole body. Maybe even hear its numbing vibration as it pulls through the whole volume of your body. Take a minute to just be in your body.

We can now take a little break. 5 minutes.

Part 2 [Becoming Jellyfish]

[\[sound\]](#)

We as humans look at the world from an anthropocentric perspective. Some people argue that exploring views other than anthropocentric could help us understand our entanglement with the world around us and the beings that build it together with us. Meaning, we as humans would not be the centre of the world. Our identity as humans is diffused in a larger ecosystem. Actually, if you think about it being human means being human, but not only... for example, think about bacteria in your guts (de la Cadena, 2014, p. 256). Or that we are made of matter that might have previously made other beings.

I would like to invite you to become a non-human and see what would happen to the way you see the world. The non-human, regardless of whether they want it or not, are part of our economy, politics and everyday existence. On a daily basis, we impact their livelihoods probably more than they impact ours. Many of them become commodities without agency. Without a chance to speak for themselves.

In this exercise, we will become jellyfish. I can't tell you how to be a jellyfish exactly, so feel free to explore it as I speak. You can keep your eyes either open or closed.

let's become jellyfish

as a human, you have a brain that largely regulates your functioning
we locate our consciousness in our brains; we think we exist behind our eyes; that's where we make decisions

jellyfish have no eyes

Imagine you have no eyes

jellyfish have no central nervous system

imagine your brain power spreads from the centre of your head to your arms and legs and your fingers and your toes

Your entire body becomes a big brain

It can all process what you experience the way your brain does it
different parts of your body can react to what they feel independently
but also without seeing what's happening around them

Can you focus on one of your arms

you don't have bones

Your body is loose

You can float in the water.

You can propel yourself with the bell, the mushroom-like part of your body on the top
can you try to move? how would you move and where? How do you decide where to go?

You also have long arms that feel things and that can sting

Can they tell you where to go? Can you try to sense with them where to go and move yourself there?

When you encounter something how will you react to it? How do you decide how to react to it? How do you know it's a danger? Or how do you know it's not?

You don't feel pain. So, it might be a bit hard to know what's good for you and what's not.

The jellyfish, or your jellyfish body can be immortal (Figas, 2022). You may for the time being turn into a polyp. And then bloom in flowers that will then separate from the polyp and become a little jellyfish again.

Can you imagine living for eternity in more or less the same form? And without eyes? And without a brain?

So, global warming is making the water warmer (ibid.). You thrive in that. You prefer warm water. So there are more jellyfish like you appearing around. You may even feel them. Feel free to try to feel them around.

According to people, there are too many jellyfish. And they want to use your body to filter microplastics. They are researching that right now. Did you know that? Do you agree to do that? Are you happy to do it pro bono?

Are these really the questions you ask yourself as a jellyfish? Do you ask yourself any questions?

You still have needs though. Like we all do. And you will have them for way longer than many other beings. What is that you need?

Now, feel your brain strings wiring up and accumulating in your head. Your body solidifies. You have bones again. You can stand straight. You have eyes that you can open. You are a human again.

And now I wonder, what do jellyfish have to do with the microplastic pollution?

Part 3 [Breathing with a plant]

In the previous part, we got more in touch with ourselves. We might have become more aware of the bodily dimension of being a human. As I mentioned before, we are a part of something, we don't exist in a vacuum. Some people say that everything is relational. Our being is made of relationships.

What a number of my interviewees explored were relationships with the non-human. Both living and non-living. And I would like to invite you to try to explore a different relationship with a plant.

I think some of us do care about the plants we have in our apartments. I think we all know how important plants are for our existence. We eat plants, we build houses with them. Take a moment you can maybe close your eyes, and think about a moment when you were surrounded by plants and you were very conscious of that. You notice them. How did you feel in that moment?

Hearing about environmental degradation, deforestation etc. I sometimes feel like we are destroyers. Like we benefit from them more than they benefit from us. But I do believe there's care from our side in this relationship.

You can move the pot closer to yourself.

One of the ways in which actually sustain plants is our breath. The very basic and absolutely necessary function of our body. So what happens when you breathe, is you exhale CO₂, which the plant takes in and turns into oxygen.

Take a moment to appreciate that. And see how you feel about that? What do you feel when you realise that?

If you think about it, especially looking at a particular plant in front of you or thinking about the plants that live with you, that can be quite an intimate exchange. Intimate in the sense of exchanging something that comes from the depths of your body. In the sense of caring for the well-being of your partner and attending to their needs and sensitivities.

Usually, when you realise that intimacy, visceral intimacy with another human, you already know each other. You may even love that person.

How would you get to know your partner? I'm wondering how would you befriend your partner.

Take a moment to get to know your partner. How would you get to know them?

How would you make this situation comfortable for both of you?

Do you have any feelings towards them?

How would you communicate with them?

8.2.2 Planning

Friday 03.11.		
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14:30	People arrive	
14:35	Intro	
14:45	Exercise 1	
15:10	Break	30 mins
15:15	Exercise 2	15 mins
15:40	Break	
15:45	Exercise 3	
16:00	Break	
16:07	Group discussion	
16:40	Clean up	

8.2.3 Questionnaire

Dear participant,

Thank you again for participating in my workshop on the 3rd of November at EMMA Centrum in Utrecht. I appreciate your presence very much. I would like to ask you a few questions regarding your experience of the workshop.

The questions below are open, which means that you can answer them freely. You are very welcome to elaborate on any thought as much as you like. It can be long, it can be short. There are no right or wrong answers and I will greatly appreciate your honesty.

It would be great if you could send your responses by the 10th of November the latest. In case not, please let me know.

Once more, by responding to this questionnaire you confirm, agree and understand the following:

- *I am satisfied with the received information about the research;*
- *I have been given the opportunity to ask questions about the research and any questions that have been raised have been answered satisfactorily;*

- *I had the opportunity to think carefully about participating in the study;*
- *The data to be collected will be obtained and stored for scientific purposes;*
- *The collected, anonymous, research data can be shared and reused by scientists to answer other research questions;*
- *I have the right to withdraw my consent to use the data;*
- *I have the right to see the research report afterwards.*

Thank you again for your participation!

Best,

Julia

1. What is your age?
 - a. <20
 - b. 21-25
 - c. 26-30
 - d. 31-35
 - e. >35

2. Embodiment exercises, is it something you've done before?
 - a. Yes, I do it regularly
 - b. Yes, I do it sometimes
 - c. Yes, I have done it a few times
 - d. I've never done it before

3. How did you experience the embodied aspect of the workshop?

Content

The workshop consisted of three exercises:

- the body scan, in which we check-in with our bodies from our feet to our heads
- becoming a jellyfish, in which we let our brains spread through our whole bodies
- and breathing with a plant, focused on the reciprocity of this relationship

4. Which part of the workshop did you find the most impactful, in what way and why?

5. What came up for you during the body scan/meditation we started with?
6. What came up for you when embodying the jellyfish?
7. When I asked you to build a relationship with a plant, how did you do it and why?
8. What came up for you when building the relationship with a plant?
9. How did the workshop contribute to your ideas on how one could live more sustainably alongside other humans and non-humans (living and non-living)?
10. Did you learn anything during the workshop that you would like to incorporate in your daily life? If, so what would it be and why?
11. If you feel like there's an inner (or outer) creative in you, feel free to use the space below to express the experience of this workshop in a creative way! Poems, drawings or anything you can think of is very welcome. Feel free to also drop a song, book or poem titles. Thank you!

8.3 Appendix 3

Extended descriptions of the embodiment practices

Artist	Practice	Description of the Practice
Meredith (she/her)	"Unsettling the Settler"	<p>The practice took the form of a meditative body scan with elements of spoken word, such as repetitions of a word "shake", and was accompanied by background mediation sounds. The practice starts with grounding exercises: feeling the gravity that is pulling people to the ground.</p> <p>The content of the practice was guided by the question of how capitalism feels or how people feel when trying to meet the expectations of the capitalistic system. Meredith referred to how everyday personal experiences influenced how people felt in the different parts of their bodies. Starting from the feet and ending at the jaws, Meredith invites the audience to examine what they sense in their bodies and why. For example, Meredith links the tiredness of the feet to overworking in an underpaid job that requires standing, which one needs to perform to make ends</p>

		<p>meet. The artist ends the meditation by asking the audience to reflect on what the physical sensations in their bodies informed them about and how they would like to use this information to influence the ways they act in their everyday lives.</p> <p>Throughout the meditation, Meredith mentions chrononormativity (the use of time to organize individual human bodies toward maximum productivity (Freeman, 2010, p. 3)), memory stored in the body as well as the human desire to achieve perfection and control over their environment and conforming to what is socially expected to be desired/important. The artist also recognises how some people recognise nature as a place of healing and desire sensorial interactions with nature in forms such as sounds of rain recorded to help people fall asleep or scents captured in candles.</p> <p>Meredith developed the practice motivated by the claim of Generative Somatics, an organized network of politicized somatic coaches, therapists, and healing practitioners who work for social and environmental justice (Generative Somatics, n.d.). The claim read as follows: "The embodied transformation of the self leads to the embodied transformation of the collective, which leads to systemic change".</p>
Ianis (he/him)	"What is Economy for Whales"	<p>Ianis began with a presentation with images and an explanation of how different animals experience the world with their senses. The artist explained how for humans, sight is the main sense that enables locating oneself and relating to others. Afterwards, we read the short three texts written by Ianis on how dolphins, manatees and whales experience their surroundings and tried to imagine with our eyes closed how it would be to live in water as a dolphin, manatee or whale. Finally, we discussed how having tried to see the world from the perspective of a whale, what value, debt and economy are for whales. During the discussion, it became rather apparent that we know very little about how whales think and what they value if speaking of values is even relevant when speaking of whales. Yet, we make whales a part of our economic system by for example commodifying them, without knowing whether they agree to that.</p>
masharu (they/them)	earth eating	<p>masharu started the practice as a response to their craving to eat earth and clay. For the artist, eating earth is a way to calm down and feel more grounded, when dealing with the challenges of everyday life.</p> <p>For earth-eating practice, masharu collects edible soils and clays from around the world (when travelling, purchasing them online or as gifts from others) and offers them to the audience to touch and feel their consistency with their hands and taste them. Some people shared that, next to experiencing different flavours of soils and clays, they also had a feeling of being transported to places that they were reminded of by the taste, the texture of</p>

		soil/clay and the feelings the soil evoked.
	Intercourse with Clay	The theme involved multiple performances and workshops, during which masharu together with other artists and the audience interacted with the soil and clay with their whole bodies. The performances/workshops explored different topics on human interaction with soil, such as the interrelation and non-Western traditions of manifesting the human-earth relationship. During the workshop at Gerrit Rietveld Academie, masharu prompted the students to allow their intuition, rather than predetermined ideas, to lead their interactions with the soil.
Dani (she/they)	"Co-sensing with Radical Tenderness"	<p>"Co-sensing..." was a performative reading of the text based on the writing by Dani, Vanessa Andreotti and Gesturing Towards Decolonial Future collective.</p> <p>Dani invites the audience to follow their moves as they perform the reading. Dani begins with gently touching their face and becoming aware of how the face feels when is touched by and when it touches the hands. The artists invite the audience to, through touch, recognise the knowledge and memory of the past experiences their bodies have and tune into non-linear and non-normative time. Next, Dani touches their face with more pressure and expands the touch to the neck, arms and belly. The artist spreads clay over their body with the movement. Dani recognises other-than-human bodies as parts of their body: Dani's neck is a waterfall, ears are succulent plants and hands are parts of plastic packaging Dani opened in their life. The artists invite the audience to recognise their bodies as part of the collective body of earth and the beings that inhabit it. Dani massages their chest in a gesture of opening it as a metaphor for opening one's heart to feel the pain, caused by injustice, destruction etc., that is experienced all over the world.</p> <p>Finally, the light in the video gets darker and the artist invites people to self-reflect on the patterns of behaviour and relating to others they have learnt throughout their life. The artist proposes to try to overcome individualism and the need for control and embrace the uncertainties in their lives.</p>
	"consistency"	<p>The practice was a documented research process performed together with Fernanda Eugenio as a part of the project Dissolution practices.</p> <p>The artists stand in a body of water, which could be a pond or a lake. They attempt to dissolve the contours of their bodies and rid of their identities by looking at the blurry reflections of their faces on the surface of the water (Fernanda) and by covering their face with the layer of mud from the bottom of the water body (Dani). Fernanda holds the mud in her hands, forms it and allows it to dissolve in the water, simultaneously reflecting on</p>

		dichotomies of singular vs. collective, familiar vs. other etc.
Alina (she/her)	"baldio"	<p>In the documented research process, Alina grows plants and examines their development. The artist touches the wet soil and the roots. Alina places plants in pots, fills the pots with soil and waters the plants. The artist understands plants as beings that interrupt the automatization of our lives and invites mindful observations of their growth.</p> <p>Alina also explores the idea of burying - part of the plant is not visible to her eyes, as it is buried in the soil and possibly also begins to decompose.</p> <p>Alina accompanied her process of growing plants with a list of questions, such as: "How to generate intimacy with plants?" or "How not to impose, colonize?" (MAGMA, n.d.).</p>
	"Hacer un pozo"	<p>Alina Marinelli created a choreographed performance "Hacer un pozo" on rhabdomancy, an ancient practice of sensing the underground bodies of water such as lakes or streams (Marinelli, 2023). The artist translates the name rhabdomancy, into "perception by the senses" or "ability to feel". In the performance, Alina and her fellow performers Camila Malenchini and Mariana Montepagano, transport water between different vessels in their mouths and carry the water in their pieces of clothing. They pass the gulps of water to one another, on their way from one vessel to another, in gestures that look like kisses and spits. Some performers were carried by others while carrying the water in their mouths. The water spills on their bodies and their moves are fluid imitating water (Gomez, 2013).</p>
Victoria (she/her)	"Multispecies Choreography - Attunemnet"	<p>The performance was one of the three scores Victoria designed as a part of the "Multispecies Choreography" practice. The score was a collective practice, in which a group of participants was given a piece of fabric to walk around the field with, holding the fabric with their hands close to their bodies. The practice was inspired by the movement of cow/cattle-herding. The practice required people to attune to one another to be able to move collectively through space (McKenzie, n.d.).</p>
	"Multispecies Choreography - Negotiation"	<p>During the "Negotiation" score of "Multispecies Choreography", Victoria sat around fungi together with her students, Victoria sat around fungi and moved their bodies in what she called <i>negotiation</i>. Depending on what people sensed and observed, once they give power to fungi to decide how the interaction proceeds, then the people would take the power to influence it and they would move their bodies accordingly.</p>