

ZOE ANTYPÁ

**THE BODY AS AN
ECOSYSTEM:
RE-INVENTING
INTIMACY WITH THE
MULTISPECIES BODY**

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PRACTICES**

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RE-INVENTING INTIMACY
WITH THE MULTISPECIES
BODY

ZOE ANTYP
MA PERFORMANCE PRACTICES

A Thesis presented by zoe antypa to Master Performance Practices, in partial fulfillment of the requirements for the award of Master of Arts in Performance Practices, 2025.

HOME OF
PERFORMANCE
PRACTICES

2025

SYNOPSIS

This thesis explores imagining the body as an ecosystem, integrating visual and performance practices with posthuman feminist theory. The primary goal is to facilitate ways towards the re-invention of intimacy with the multispecies body, making notions of interconnectedness, affective material agency and relationality performatively accessible through artistic and collaborative practices. To explore this, it proposes a methodology of *becoming-with* posthuman feminist thought, scientific insights, human and other-than-human collaborators.

The main hypothesis is that embodied, emotional and sensory engagements can transform human perceptions on the body and interspecies relationships and foster new forms of ecological intimacy. Situated within the broader context of ecological crisis and systemic injustice, this research responds to the intertwined political and environmental repercussions of alienated human-other-than-human relations, by approaching the body as multiple and multispecies site. While acknowledging science's contribution in understanding the world, it departs from its limitations and proposes a symbiotic approach to knowledge-making, on artistic, ecological and social level.

Methodologically, it employs interdisciplinary collaboration with an ecology biologist, practices of guiding visualization and *giving-body* - to describe a visual practice that extends beyond representation-, body based practice in group setting and a phenomenological approach for interpreting the impact of the methodology. Research outcomes include a method for performance score making based on the mechanism of breathing, promoting affective relationships as modes of knowledge production and ecological approaches on making. Additionally, it introduces the neologism *symbiotic bodyset*, to describe the awareness of affective entanglements with human and other-than-human bodies, tethered on the material reality of the body, as a mode of researching, performing and creating.

Ultimately, this research underscores the urgency of embodied, affective forms of knowledge production, offering methodological tools that contribute to emerging discourse in posthuman feminism, performance and visual art, by positioning the body as a site of multispecies relationality and ethical engagement.

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DECLARATION

II, zoe antypa, hereby certify that I have personally carried out the work depicted in the thesis entitled, *'The body as an ecosystem: Re-inventing Intimacy with the Multispecies Body'*, except for certain parts that were developed in a collaborative setting. In particular, I received support from Iris Bredehoft, who contributed scientific insights, as well as from Tess Doucet, Mar Esteban Martin and Misha Kazakov, who participated as members of the working group. All collaborative contributions were made under my direction and as part of the research process I facilitated.

No part of the thesis has been submitted for the award of any other degree or diploma prior to this date.

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LIST OF ABBREVIATIONS

DIY: Do It Yourself

INTRODUCTION

This practice-as-research adopts an embodied and performative approach on exploring the multispecies body, situated in the posthuman discourse. It specifically investigates how visual and performance practices can facilitate ways of re-inventing close, intimate relationships with the multiplicity and heterogeneity of the body. By recognizing the human as a microbial ecosystem, the research re-imagines approaches to engaging with materials and bodies that reflect this symbiotic perspective—integrating it into modes of living, creating, and relating-with.

Challenging traditional frameworks that categorize and divide bodies into reductive binaries, this research seeks to temporarily suspend such boundaries by positioning the human body as a multiple and multispecies site. It responds to the ecological and sociopolitical consequences of disrupted human-other-than-human relations— which manifest in environmental crises and policies of systemic violence against those that fall outside the category of the human and specifically, the white, Western male. Within this context, the project generates an artistic methodology that advocates for co-creation with both human and other-than-human actors, cultivating awareness of the interdependent material networks that constitute our shared realities.

This research aligns with posthuman feminist thought in seeking embodied, collaborative, sensorial and relational research approaches, embracing the subjectivity of perception and focusing on the embodied experience. While acknowledging science's role in understanding the world, it moves beyond its limits to propose a symbiotic approach to knowledge-making. Through artistic practice, it looks at how knowledge can be produced from "within and as part of the world" (Barad, 2007, 88), considering at the same time the ecological and sociopolitical dimensions of such attempt. Alongside its environmental and ethical urgencies, this research also considers how an artistic research can be conducted through posthuman feminist lens. While posthuman discourse often remains abstract and theoretical, this research proposes a *becoming-with* as main principle of its methodology. In this light, the employed practices and methods -interdisciplinary and body based collaboration, visualization and giving-body practice and breathing mechanism for score making- are based on learning from the other, while their effects on the embodied experience of the participants are examined through a phenomenological approach.

By advocating for embodied understanding as a primary mode of knowledge production, the research's methodology engages with notions of relationality, affective agency

and interconnectedness on an imaginative, individual and collaborative level. The emergent notion of *symbiotic bodyset* addresses a performance mode that is responsive to affect and adaptable to shifting perceptions.

Chapter One outlines the theoretical framework, exploring dialogues between posthuman feminist theory and scientific perspectives, supported by artistic examples outlining the research's scope. Chapter Two details the methodology, combining interdisciplinary strategies, visual and performance practices, a score-making method and a phenomenological approach for data collection. Chapter Three reflects on key research components, ethical considerations, limitations and further developments. The conclusion consolidates the research's contributions, showing how practices the employed practices can become tools for knowledge production and ethics, emphasizing the need for embodied understanding.

CHAPTER 1: CONTEXT OF STUDY

The context of this research is situated in the intersection of visual and performance practices and posthuman feminism. The guiding question of this research revolves around the possible contributions of visual practices of *giving-body* and visualization, interdisciplinary and collaborative improvisational performance practices to the posthuman discourse, specifically, in the re-invention of intimacy with the multispecies body. The term *giving-body* is used as alternative to object making, signifying the act of materializing the invisible in space. The notion of re-invention - central to the research question- is inspired by the way biologist and feminist Donna Haraway proposes it, which aims to transform how humans understand and relate to nature. Among other posthuman feminists, she advocates for a nature-culture continuum, rather than discrete contexts, where each profoundly influences the other (Haraway 1991, Braidotti, 2013, 8). In that sense, this research sees the human body as multispecies site through artistic approach towards more ecological, symbiotic views on how nature and culture, human and other-than-human, theory and practice can symbiose.

This work primarily engages with key posthumanist tenets: redefining the human through its relationships, emphasizing fluidity and interconnectedness, and seeing

matter as active agent in the phenomena. These principles collectively advocate for an ethical stance that extends moral consideration beyond solely human interests. In the words of posthuman philosopher Rosi Braidotti, posthumanism signifies a departure from traditional dualistic frameworks, compelling a de-centering of the human as privileged entity, but as fundamentally interconnected with all biotic and abiotic entities inhabiting the global environment, proposing a rethinking of the bodies as relational and affective (2022, 117). In this light, the interdisciplinary posthuman branch of new materialism emphasizes the dynamic role of matter, rejecting notions of fixity, building on the idea that subject and object are not distinct, rather are “in and with the phenomena they produce” (Hammarström, 2010, 10). This perspective challenges hierarchical views and the notion of individuality, by highlighting the co-constitution of material experience through relationships. In contrast to the Cartesian mind-body split, for new materialists like feminist theorist and physicist Karen Barad, the affective and sensory engagement with the world is part of the knowing process (Barad, 2007), as is the mind. In this light, the embodied experience has a central position in this research, as main source of knowledge.

In order to attempt to view the human in different terms and underline its participation within the dynamic network of interspecies and material relations, this research approaches the human body as a multiple, multispecies

and heterogeneous assemblage, inviting exploration of the relations with the micro-others of the body. Yet, this idea is extended to our broader ecosystem. By identifying the body as an ecosystem, I look for the performative effect of such perception. Meaning how the body works, performs and consequently lives by perceiving itself and its co-beings as part of an interdependent network.

Against this setting, this research sets intimacy as objective, defined as a relationship of closeness and connection of a deeper emotional and mental understanding. Drawing for the notion of reparative reading, introduced by feminist scholar Eve Kosofsky Sedgwick through which she calls for more empathetic approach of engaging with culture (Sedgwick, 2003), this research proposes a mode of reparative practice. While here individualistic and discriminating structures of human exceptionalism are acknowledged, this practice-as-research attempts to look for ways to flourish within these structures, by generating a methodology and creating space for connection and co-creation with human and other-than-human bodies, shifting the focus on the embodied, emotional and sensorial experience of the body as a source of knowledge.

Thus, this research offers a *becoming-with* methodology, to contribute in these symbiotic understandings with the other-than-human, contrasting the isolating practices that emerge

from the notion of individualism as one that sets the bodies as separated from their environment. Evolutionary biologist Lynn Margulis and poet and ecology theorist Dorion Sagan define symbiosis as

Prolonged physical association between two or more "differently named" organisms, generally from two or more different species. Levels of partner integration in symbiosis may vary in intimacy; integration may be behavioral, metabolic, of gene products, or genic.
(Margulis and Sagan, 2002, 196)

In their work, the authors state that in evolution -apart from natural selection- and in the development of complex life forms, the *long lasting intimacy between strangers* constitutes major practice in becoming-with the other. The definition of becoming-with varies in different philosophical intersections, yet the common denominator is proximity, shared affect and co-creation, as interpreted in works of Haraway and Braidotti. In that sense, aligned with the views of posthumanism, Margulis and Sagan advocate for an entangled network of bodies that decenters the human and highlights the interconnected dynamics of matter. Intimacy in this research is approached through the active engagement of the body with its multiple self and the human and other-than-human entities around it. Thus, by (re)searching for a re-invention of intimacy, it sets in the foreground the urgency for an embodied, affective and sensory understanding of the complexity of the body as a micro-scale of the world's broader ecosystem.

Although biology is not a formal component in the research's

field, insights have been incorporated through both literature review and a collaborative exchange with the ecology biologist Iris Bredehoft. This interdisciplinary engagement, while not intended to contribute directly to the field of biology, supported the conceptual and material development of the project – particularly in relation to interspecies relationships and the role of embodied engagement in the research process. It revealed how artistic and scientific methods can be complementary in knowledge production. The biological perspectives enriched the understanding of the human body as a multispecies entity, while exposing certain epistemological limitations within scientific discourse. These limitations became productive points of departure for the embodied practice, encouraging the exploration of human body as an ecosystem. Inspired as well by the continuous feminist critique of scientific biological determinism by Judith Butler and the examination of science-politics interconnections as in the work of Haraway, I look at the intersection of science and art through posthuman lens to bring theory and practice as interlocutors and offer embodied possibilities that can limit the distance between the human, its multiplicity and its other.

The often inaccessible scientific language, the imaging and the descriptions as means of communication of data, as the cultural historian Jonathan Sawday states, could be considered as passages "into the body, but not my body" (Sawday, 1995, 7). Through the dispassionate observation (van

de Vall, 2009, 4) of the micro and macrocosm, the significant fellow others become a distant object of examination, turning the multispecies site of the body into a oppressed landscape. Scientific means offer access to the body and contribute in expanding our understanding of the world, and thus cannot be discredited. At the same time, traditional science often forces a disembodied perception, isolating the body from the interconnected material network and its multispecies reality. In order to limit this distance, the body in this process is holistically positioned as an active participant in the understanding of its complexity. Yet the language is not the only obstacle. How knowledge is generated directly influences the relationships between bodies and between body and the self. The lack of positionality in traditional science, namely the absence of locating the knowledge in the body's cultural, historical and social context, reinforces greater distance, claiming to transcend limits and responsibilities (Haraway, 1991). This "god-trick of science", as Haraway puts it, assumes a transcendental view over the world, where knowledge is produced from a disembodied agent promoted as neutral, objective reality. Positionality is considered as the acknowledgement of the partiality of view and the importance of locating the produced knowledge, and according to Haraway can offer perceptions that are closer to the actual embodied experience (1991, 282).

As the lack of positionality in science fosters distant relationships between body and its multispecies nature, a different kind of engagement should be employed in order to arrive to closer, symbiotic, intimate relationships with body's multiplicity. Thus, this research not only aims to highlight the significance of the embodied experience in the understanding and living of the world, but also embrace the subjectivity of perception. As complementary to the scientific rather than against it, situatedness of knowledge in this research is approached through interdisciplinary and body based collaborative practice that draws from everyday performativity and consequently one's history, utilizing imagination as a faculty fundamentally subjective, and inviting for continuous reflection throughout the process on the embodied experience.

Apart from being primary artistic implement, imagination is employed as a posthuman tool. While it is a faculty examined and addressed by several disciplines, here has a central role in the process of cultivating intimacy with the multispecies body, due to its capacity to break the boundaries of identity, materiality and reality, and envision multispecies futures (Haraway, 2016). Lying at the core of posthuman concerns, imagination allows for restructuring and deforming of the known, bringing different possibilities and perspectives on the surface, sourcing from the personal and subjective experience

of the body. For Braidotti, imagination makes it possible to the subject to discern and gain access to the contingent realities of social existence and how ordinary experience is constructed (2006, 163). Along these lines, imagination is not an ephemeral afterthought we have the luxury to dismiss or romanticize (2024, 13) as observed the sociologist Ruha Benjamin, but it can actually impact the material reality and the way the body and the world is perceived. Thus, the aim is to enable imagination and actualize it in the research process, as bringing a reality where multiplicity, complexity and intimacy is embraced between strangers, in the current reality conquered by idealized individualism and simplification. In this line of thought, imagination is utilized as a tool to attempt an access to the human microbial ecosystem, bypassing the scientific mediation. The body does not need to be re-imagined as an ecosystem - it is a scientifically proven fact. Yet, there is an urgency to re-imagine and re-invent our relationship with the other-than-human and infuse our artistic and everyday actions with perceptions that emerge from the affective connections with the other (Barad, 2007).

PERFORMING AS AN ECOSYSTEM

Over the past decades, following the continuous expansion of posthumanism and feminist critique of individualism and

human exceptionalism, artists equally started to employ their practice addressing the interconnectedness of bodies and the microbial inhabitants of the body as a way to redefine the human body.

From the perspective of visual practices, Anna Dimitriu and Alex May's *Superorganism* (2014) is an interactive bio-digital installation that fosters a reconnection of the viewer with the body's multispecies reality. It projects enlarged skin microbiome (collected via DIY techniques) onto a large screen, while motion sensors detect spectators, causing bacteria colonies to form their shape, making the microbiome human-sized. This interactive event becomes the means of "reimagining old models of knowledge" (Stępień, 2022, 98), allowing the participants to move and interact with the ecological environment of the human body actively, in real time and space. Focusing on the embodied experience of the spectator, Dimitriu and May pursue a process of familiarizing in a playful yet educational setting. By analogous means, the artistic collective Tangaj in their work *BLOT-Body Line of Thought* (2022), shed light on the microbial environment of the human body. Focusing on the bacteria of the human body, as beings that keep us connected to the planet, this hybrid performance aims to redefine the body through its coexistence with microbes, highlighting invisible yet vital connections. Similarly to *Superorganism*, the microbiome

of the performers is displayed throughout the performance, offering as well choreographic and movement tools through which the performance unfolds.

Ichthyolatry (2023) - the hybrid confessional performance as its maker Eva Giannakopoulou describes it (Giannakopoulou, 2023) - utilizes the autobiographical narrative in relation to the water as interconnective element, as the feminist and cultural theorist Astrida Neimanis proposes. Where environmental studies and feminist posthumanism meet, Neimanis in *Bodies of Water* (2017) proposes a hydro-logical perspective to reimagine planet and life, highlighting the entanglement of the human body within an ecological, historical and political network of affiliations. This view challenges the dominant western thinking on autonomy that isolates the human and posits it in static terms of individuality (Hill, 2020, 125). *Ichthyolatry* unfolds based on this perception, around the personal experience of the performers in the form of spoken word, merging personal and theory, science and philosophy.

Altogether, the compatibility between this research and the artworks lies in their shared focus on cultivating diverse forms of interspecies and material relationships, particularly those involving the dynamics of affecting and being affected. Strands of this research are focused as well on interconnectedness and the affective power of other-than-human beings -both

living and non-living-, offering a multilayered approach on engaging with them, with the body as main source. In the first case Dimitriu and May offer an interactive experience with human's microbiome and Tangaj Collective additionally, transforms the functions and mechanisms of the microbial communities into choreographic modes. Yet, while the employed visual practices in both artworks expose the microcosm of the human body and transform it into artistic modes, the focus lies predominantly within the realm of representation. Whereas this offers access to body's interiority, connecting it with Sawday's view on scientific means, the display of the microbiome creates a relationship with the body's ecosystem that remains outside of the body and on a level of cognitive reflection. Thus, acknowledging in this way the limitations and limits of representation, the methodology of this research aims to extend these relationships in the body.

On the other hand, the collective creation and the narration of material, interspecies relationships in *Ichthyolatry* constitutes valuable examples of practicing posthuman knowledge, through shared existence -in living, being and working- and mutual transformations through the element of water. Yet, this research aims to go deeper into that by exploring how the interconnectedness and multiplicity can be infused in the visual, performance and collaborative practices and consequently examine what this knowledge eventually does

to the body. Thus, beyond the modes the aforementioned artwork employs, this practice-as-research additionally offers an engagement with the multispecies body through what it is available (everyday material, DIY processes and interaction between the multiple, heterogeneous body of the performers) and inherent to the body (imagination and breathing) in real time. These practices and methods are expected to cultivate awareness and a particular *symbiotic bodyset* -as a more holistic alternative to mindset- that is characterized by openness and awareness to interspecies and material relationships, as a mode of being responsive to affects in performing and creating, beyond comprehension and direct physical engagement.

This research examines how the body through slowness, attentiveness, embodied and imaginative participation that these practices inspire and demand, can enter a state of presence and awareness of our inner and outer ecosystem. This state is not considered as a spiritual condition, rather is tethered to the matter and the physical reality of the human body. Invoking the subjectivity of perception - subjectivity of imagination, reflection on the body while engaging with the other-than-human in visual processes and drawing from the personal by referencing everyday performativity-, the work invites each practitioner to find and observe how their own body expresses the affective relationships that are generated.

Thus, this research advocates that intimacy and ecological relations with the human's other cannot emerge through distant perceptions, but through the subjective, sensorial and embodied involvement. Bringing a multiplicity of bodies in the practice, is an additional layer of how these different perceptions can co-exist. Briefly adopting the perspective of the others - as happened in the body based collaboration by the prompts *copy* and *participate*-, is an approach to a more complete understanding of both humans and other-than-humans as collaborators. Consequently, by engaging with these practices, the participation of the invisible (and) other-than-human gains presence in the process, while duration and repetition of these tasks offers emotional and sensory sensitivity in and potentially, outside the context of the research. In that sense, the focus is on making the invisible present and visible, not through representation but through realizing the affective and transformative agency of the other.

CHAPTER 2: DESIGN OF STUDY

A BECOMING-WITH METHODOLOGY

This chapter outlines the primary methods used throughout the research, offering detailed descriptions and situating them within the broader research framework. The processes of interdisciplinary collaboration, visual practices of guided visualization and giving-body, body based collaboration, breathing mechanism for score making and phenomenological approach for data collection are analyzed, while also incorporating limitations and insights from the feedback sessions. The study and practice was conducted in a continuous becoming-with literature and field review. Meaning that concepts and views of posthuman feminism were in constant dialogue with the practice, as a process of thinking and practicing-with theory. As Deleuze and Guattari state, concepts constitute “an act of thought” (1994, 21). In this light, interconnectedness, relationality and affective agency of matter accompanied the practice, instead of directing the potential expansions of the research.

The research was presented in a 45-minute event, under the title *SYNTHETIC.SYNTROPHIC.SYMBIOTIC* (2025), structured in two parts: first, a performance presenting a more refined iteration of the overall methodology, followed by an open

space, inviting the audience to engage with the materials and remnants of the actions. The exposition provided central parts of the employed methodology, yet it was dramaturgically organized in a way that would allow the audience to participate in certain parts of it and explore several research outcomes that were available in space. I would invite the reader to visit the link of the exposition's documentation (see appendix A1) for a more complete view of the event, and to better understand what is being analyzed in the following sections.

2.1 INTERDISCIPLINARY COLLABORATION FOR INTERSPECIES RELATIONSHIPS

Collaboration was purposefully selected as a core method to enrich the research with diverse voices and to actively demonstrate the co-existence of varied viewpoints. As this research aims to see how posthuman thought can dialogue with artistic practices while tethered on the material world, it was important to understand on a first level how an ecosystem functions and thus, what human body as ecosystem could mean. Therefore, the field of biology served as source of information and interlocutor. Apart from the literature review, it was important to be in contact with an expert in the field, to exchange views and provide their own experience -professional and personal- in multispecies ecosystems. To facilitate a meaningful entry to this discipline, I initiated an

ongoing collaborative process through the form of open call in two universities of the Netherlands, inviting biology students to participate in the research and practice. My performance practice, rooted in embodied inquiry, found a critical counterpoint and empirical grounding through collaboration with an ecology biologist, whose insights into specific ecological structures significantly informed the performative practice and conceptual framework. This collaboration moved beyond mere consultation, fostering a symbiotic exchange where scientific models influenced artistic decisions and opened space to think of how embodied practices could support scientific inquiry and vice versa. The guiding hypothesis for these sessions was that embodied, emotional and sensorial engagement with more-than-human ecosystems at both micro and macro scales, could transform interspecies relationships.

From February to April, I met one to two times per month with the ecology biologist Iris Bredehoft, master's student in Conservation and Restoration of Ecology in Radboud University of Nijmegen. This iterative process involved exchanges of how we see interspecies relationships from artistic and scientific point of view, as well as we reciprocated information about our practices - how protocols form scientific research and how art and embodied engagement could expand data into embodied experience. Thus, part of our talks revolved around the mutual contributions of

scientific inquiry and embodied artistic practices as distinct yet complementary approaches for learning and drawing connections between bodies.

Initially, our collaboration offered an ecological, material understanding of interspecies interactions within an ecosystem - natural and cultural. A notable part of our collaboration was related to ecosystem models, maps that lay out the complex arrays of interacting organisms. Through examination of ecological models, I was able to have a more clear image of how ecological communities transform and affect each other, giving grounded insights on interconnectedness from a biological point of view. As the ecosystem model constitutes a form of inquiry to understand how an ecosystem works, we were brainstorming on how we could expand such understanding through posthuman lens. This inspired considerations on how from an embodied perspective, the body as an ecosystem could constitute as well a model through which relationships could be understood and felt. I consider the ecosystem modeling as parallel to visual practices, both serving as modes of visualizing the often imperceptible: the subtle changes that transform an environment in time, as well as the phenomenological experience of the body. The terms interconnectedness, transformation, symbiosis and ecosystem were main anchors of our collaboration, interpreting them from both scientific,

artistic and philosophical posthuman lens, bringing forward convocations and divergences, that reciprocally enriched our understanding on these terms. For Iris this process was a vehicle to think of ecological principles in creative and unconventional ways through emotion and artistic forms, while maintaining the needed systematic processes of scientific research, thinking of it as inclusive and impactful way of communicating knowledge, as she mentioned in one of her written reflections. Her participation in this research fostered a deeper understanding on ecological relationships and provided necessary information that could connect the ecological planetary reality with posthuman symbiotic views, facilitating the subsequent practices.

This first part of the collaborative process brought forward the present limits of science, shedding light on what could be done through artistic practices in order to reinstate the disrupted connections between human and other-than-human. Thus, although the collaboration did not directly provided answers to the research question, it pinpointed areas of focus for the upcoming practice and provided material which the methodology could develop from. The collaborative process was transferred in the studio space, enriched with more participants which will be analyzed further in the section *body based collaboration*.

2.2 VISUALIZATION AND VISUAL PRACTICES: PRACTICES OF CLOSENESS

Collaboration with the ecology biologist opened space to what could be done differently, in order to set the body as main source of knowledge, rather than a detached executor. Through practices of guided visualization and body-giving building on scientific insights, the work expanded interspecies relations into emotional and sensory experiences. These two types of visual practices address the shift of perception, looking and engaging with the micro-other in the human, through the holistic participation of the body.

Visualization - guided imagery towards interconnectedness

Within posthuman discourse, guided visualizations and meditative experiments are common tools for reimagining interspecies relationships. The power of imaginative engagement lies in its ability to generate body-centered experiences and offer alternative frameworks for perceiving the world, thereby fostering new connections. This approach is mirrored as well in Doerte Weig's *Lichen Encounters* (2022), where the visualization script makes a parallel between the human body and these complex lifeforms, guiding the participants through the lichen's different layers and qualities.

Weig highlights that our human imagination does not only stimulate the mind, but the body holistically (Weig, 2022), suggesting that these imaginative processes are vital for prompting embodied awareness and ultimately, for telling stories in new ways. As Weig's visualization invites becoming lichen, I similarly use visualization practice to re-conceive the human body as constantly in exchange with its environment through the element of air. In parallel to Astrida Neimanis who highlights the entanglement of the human body through the element of water within an ecological, historical and political network of affiliations, here I place in the centre the most vital mechanism of the body, one that is shared across species: breathing.

In times where some human and other-than-human lives are considered killable, breathing, as the feminist author Magdalena Górska proposes, becomes an articulation of the suffocating operations of social norms and power relations (2016, 23). In and outside the research context, mindful breathing is an everyday practice of mine, to deal with external and internal demands. This is a practice I use - and is broadly suggested- to cope with stressful situations that often, bring the body in a state of disembodiment. Observing bodies suffering from similar experiences in and outside the academic environment, it was essential to bring this practice with me in the research context. While practicing it, through

the lens this research proposes, the attention was shifted to the element of air as space of invisible exchanges. Thus, apart from its practical effectiveness in dealing with anxiety and disembodiment -and for staying alive-, I realized the conceptual value of air in interspecies relationships, as a space where beings meet. The breathing mechanism highlighted interconnectedness through air and served as a practical tool during the body based collaboration. While meditative practices often center on breath, I utilized this familiar element as an entry point to explore the body's inherent multispecies reality and the constant exchanges between internal and external, human and other-than-human. Respiration was thus reframed as a means of communication.

From my personal experience, engagement with guided visualizations over the years has deepened my body awareness and reshaped my relationship with it. By re-imagining the body through various concepts and imaginative journeys, I have observed how imagination can transform body's perception into something elastic and porous. By exploring various forms of guided visualization and drawing from vocabulary of posthuman theory and biology, I developed a visualization script that weaves together theoretical concepts and biological facts, grounding them in the material experience of the body. An ecosystem is influenced by what exists in and around it, as Iris pointed out in one of our discussions. These

relations inspired the cyclical trajectory that the guided visualization draws, from the surrounding environment to the inside of the human landscape, and back to the shared space around the bodies. In order to keep this process grounded to the material reality of the body, the participants were first invited to observe what exists around them, to then imagine what enters the body through the breath. Bringing back the notion of re-invention, this practice served as means to re-imagine the exchanges with the environment that are already happening, in symbiotic terms.

The visualization was used as a warm-up before every group practice and was also individually accessible to ensure its utility for a general audience. Feedback from participants, focusing on clarity, effectiveness (e.g. pace, duration, vocal elements), and comprehension, was crucial for its ongoing refinement. The insights indicated that providing visual material of the human's ecosystem could serve as references for the participants, since some found difficult to visualize due to unfamiliarity with the micro-other. For this purpose, I consulted online sources, mainly the Science Photo Library and the Biofilm Image Gallery, to extract and utilize microbiome images as frame of focus. In the body based collaboration I applied this suggestion directly. However, in the exposition of artistic research as an additional test of the practice, materials from the giving-body practice that

resemble microbial forms served as a reference point for the imagining. Providing this visual information, helped the participants to better follow the narration and focus on their embodied experience. In addition, while intentionally incorporating biological and anatomical information, those demanded a more cognitive involvement, distancing the participants from the sensorial, embodied experience. These parts were eventually removed. The final version can be found in the appendix (see A2), accompanied by a score which traces more broadly the progress of the practice and its core vocabulary. I consider this score as documentation of the refining process, showing and tracing the changes the practice went through.

Visual Practices - giving-body to the invisible

This re-imagining of breath as communication mechanism, emerging from the preparatory task of guided visualization, inspired as well alternative readings to materials' potential in the giving-body practice. The term giving-body is used alternatively to object making. Although the term object making could accurately describe this process, the wider conventional connotations and perceptions of objects consider it as passive matter while implying a focus on its utility. Here, these non-living bodies served as source of learning

about the body and about and from the other-than-human. Thus, I define the act of giving-body as providing something with presence, highlighting its potential to make the invisible appear in space -invisible as the body's microcosm, as well as the invisible emotional and mental experience of the body- utilizing it as interlocutor on conceptual and material level. Although giving-body might imply drawing boundaries around the body in a research which tries to expand and dissolve them, I find this process important as a mode of inquiry and understanding. The act of rendering visible and present in space took place through the lens of material agency as introduced by Barad, aiming to support the overarching quest for affective, intimate relationship with the multispecies body and expand the practice beyond representation.

In the hands-on processes of giving-body, the material was treated through a holistic participation of the body - physical, mental, intellectual and emotional-, turning the process of materializing into sensorial inquiry on relationality. In *The SAGE Handbook of Visual Research*, the art research educator Phillipa Lyon addresses drawing and visual practices in general, as access to the human experience (2020, 297). The author points out the close relationship that is generated between the body and the material through the attentiveness required to render the invisible (internal, mental and

emotional material of the body). The giving-body practice prompted participants to simultaneously reflect on their embodied experience while interacting with the material, in order to examine how the act of resembling the microcosm of the human body could result in experiential knowledge. The scope of this practice was to materialize the body's ecosystem as imagined in the visualization and at the same time open space for reflections on the affective material relationships.

Materializing the microcosm

From a practical standpoint, the giving-body practice was conducted using found, everyday materials, processing them through DIY practices. This method reflects a commitment to ecological sustainability in research and artistic practice. Additionally, this method could potentially foster accessibility by enabling participation for a broader spectrum of makers, regardless of their socioeconomic background. The main materials used were styrofoam, processed mostly with D-limonene¹ as replacement for acetone, and tapioca starch for making a slimy substance. Styrofoam and starch are widespread materials of everyday use, of low value and easy to find. I speculated that the familiarity that comes with these material due to their everyday usage could bring bigger

¹ D-limonene is a naturally occurring substance, found in the peels of citrus fruits.

comfort in engaging and experimenting with them and leave space for reflecting on the relations that emerge.



Figure 1: Synthetic microbial model produced in giving-body practice.

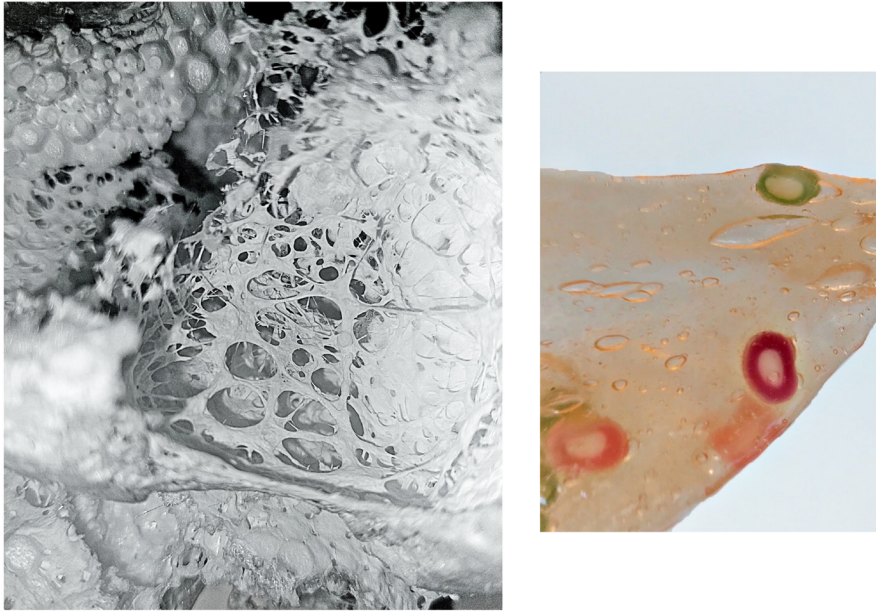


Figure 2: Processed styrofoam (left), handmade slime (right)

Processing styrofoam resulted in resemblance of body tissues structure, while the slime referenced the extracellular matrix, which is abundant in the human body. The process of melting the styrofoam demanded carefulness and attentiveness, as the outcome of this process is impossible to be predetermined. When styrofoam comes in contact with these substances, the connections of the material break and melt, creating organic patterns, close to the one's of the microbial landscape of

the body. Similarly, cooking the slime demanded as well attentiveness and responsiveness to the material in order to give the desired fluid texture. Making the slime using edible substances (tapioca starch, water and food coloring), enabled an other layer of sensorial engagement apart from touch - through the sensors of the oral cavities. Accuracy was not the goal, yet these DIY processes accomplished a similar result. While access to the micro-other's forms is limited to scientific imaging, translating them into everyday materials made them less uncanny and more familiar to our perception.

Making the invisible interactable at a perceptible scale was an invitation for relation beyond comprehension, to interact with the otherwise invisible, enabling the participants to feel, work and think-with the material. Turning the micro into macro, as in *Superorganism* and *BLOT*, recasts scale as shared space cultivating sensorial, embodied perception towards the other-than-human matter, stimulating greater responsibility and awareness. By centering the senses, the approach offered a contrast to the sometimes sterile and emotionally disengaged approach of scientific inquiry, encouraging playfulness and negotiation of agency.

Apart from the giving-body practice, significant part of the process was intervention on existing material and props. As giving-body suggests taking the knowledge literally on one's

hands, the interventions and customization of props, such as lab suits and equipment, is seen accordingly as an act of emancipation - of personalizing the relationship with the other through ritualistic playfulness, blurring at the same time the boundaries between scientific and artistic laboratory. As an example, this happened by attaching the produced material on the suits, cutting and adding props from everyday life. This part of the process had a more intuitive and playful character, aiming to add personal elements that would later be used in the body based collaboration.

Everyday materials as collaborators

Beyond ecological concerns, DIY encourages a "look around mentality", advocating for hands-on engagement with available materials. This promotes a keen observation of potential and the ability to apply alternative readings, transforming everyday materials into learning resources - from the characteristics of the body's ecosystem to how the body can work with matter in a more collaborative sense. The process of looking for techniques with what is available, the slowness, carefulness and attentiveness DIY that practices demand, anchored the body in the present, creating space at the same time to reflect on the participation of the whole body, and how it adapts to the sensitivity of the material.

Drawing from the posthuman view on matter as active agent, the body was prompted to think of the material as collaborator, benefiting from the pace and careful attention the DIY processes demand. Thus, the participants were encouraged to actively listen to the material and notice the subtle changes that take place in both the material and the body.

The body was invited to be vulnerable to transformations that happen to the material and respond to those in dialogue, rather than control the process towards a certain outcome. By rooting the awareness in the physical (inter)action, the participants could observe how those impact the materials, as an analogy for material, ecological interdependent relationships. Although this analogy might be at risk of oversimplification, seeing these relationships materializing directly through the creative process, cultivated a sensory awareness to the body. Tuning in to other-than-human rhythms, created a space where the knowledge of interdependency between bodies could be felt, and not just understood. Overall, the visual practices of guided visualization and giving-body were employed as relational learning, enabling the participants to re-invent intimacy not as closeness in an anthropocentric sense, but as felt entanglements.

2.3 BODY BASED COLLABORATION

Blurring boundaries

The practice-as-research group, comprising Mar Esteban Martin, Misha Kazakov, Tess Doucet, Iris Bredehoft and myself, each from diverse artistic and non-artistic backgrounds, was formed through a subsequent open call. Our group completed ten studio practices, allowing time between sessions to integrate theoretical material and process our work. It was particularly insightful to observe how our individual lives enriched our collective work, and how informal conversations became opportunities to reflect on everyday experiences through relationality and ecological thinking. Therefore, the time periods between practical sessions were important in order to see how the research and the specific subject can be infused in the every day life and how that fed back into our practice. This resulted in bringing actions, objects and stories in the studio. Our exchanges and collective archive illuminated the body of the performers as an additional heterogeneous, multispecies body.

With curiosity as a key driver for allowing possibilities to emerge, the studio practice was grounded in improvisational interactions, both among the performers and found or created objects. Improvisation by nature resists control, while allowing for exploration and openness within the frame of

re-inventing closeness with the multiplicity of our bodies - as individuals and as a group. This quality of improvisation was necessary for engaging in the meaning changing process, where the body is not fixed and individual, rather is perceived as an ecosystem in a becoming-with props and the bodies in space. While engaging in this becoming-with process, our contextual entry points mattered in situating our discoveries. Thus, the personal, unique perspective of each performer was infused in the studio practice by drawing from our everyday performativity, letting it merge and interweave with the context of research. Bringing personal habits, rituals and practices, was an attempt to highlight each individual's stories and background and the inherent continuum of art and life. The resulting forms, meanings, modes of working and associations that emerged from the aforementioned practices were considered as an additional *inner score* for the body based practice. We were invited to embody personal sensations that arose in the previous practices in the space and in the relations with human and other-than-human elements.

Inspired by the everyday while utilizing these sensations within improvisation, allowed for re-imagining our co-performance with the materials. Petri dishes used as pawns of an imaginative board game, liquid samplers as pumps to collect and transfer air particles from one body to the other, plastic bags and flour to render the air as interconnecting

element into visible, bird deterrent spikes as body extensions of a hybrid creature. The slime in particular, with which we initially engaged in the giving-body, had central role in the body based collaboration. Commonly perceived as a child's toy, the slime introduced elements of sensorial playfulness and curiosity into the process of engaging with other bodies. Its elastic materiality served as a prompt in terms of movement, as well as on a conceptual level. The materiality of the slime is associated to Braidotti's view on flexible and multiple identity, opposing the traditional humanist ideas for fixed and unified subject (Braidotti, 2013). The author describes the posthuman subject as capable of transformation in a constant becoming through its relations. This extended the relational learning from the previous practices into the studio practice, as invitation to allow external influences to shape our actions, encouraging us to briefly adopt another's perspective before re-engaging with our own decisions and discoveries. This idea of flexibility, inspired prompts of *copying* and *participating*, either simultaneously or at any point during the practice. For instance, when a group member was in dialogue with an object or a body, the rest had the opportunity to either copy or participate in the action, exploring another's approach through one's own body. This enriched to a great extent the performative vocabulary of the practice, which was open and shared among the performers.

I was interested to see how and what relations would emerge, rather than strictly choreographing a relational web. How a sound and performance artist, a dance artist, an activist and mother, an ecology biologist and a visual and performance artist could interact with each other's traces, knowledge and experience and provide diverse tools for weaving relations with the other. The lack of a tighter framework and intentionality in certain aspects of the group practice hindered the consolidation of the personal and self-referential aspects. Reflecting now, making individual backgrounds more explicit would have provided a clearer frame of situatedness for our collective actions and interactions. Nevertheless, the personal was always present, both as the foundation for our actions and in group discussions. Sharing personal stories—such as medical experiences, microbiophobias, relationships with the other-than-human in domestic and work spaces and the isolating effects of the notion of individuality and its manifestation in everyday life—not only unveiled deeply personal urgencies, but also fostered significant bonds within the group. These instances significantly enhanced our ability to hold space for each other - human and other-than-human—much like the slimy extracellular matrix in the body that holds heterogeneous bodies together.

The collective attunement we experienced in the guided visualization was transferred at moments in the body based

collaboration where through copy and participate prompts, manifested in collective engagement in the same action. In the performance part of the exposition we wanted to transfer this moment of shared experience with the audience members. Considering the spatial or physical limitations that might possibly restrict the audience's participation, we focused on imagination and breathing as accessible mechanisms we all share. Thus, this element of unison was brought in the performance space by collectively practicing the guided visualization.

Care as posthuman feminist tool

Sharing personal stories, listening to, holding space for the other and the moments of performative attunement illuminated another layer of intimacy with the metaphorical multispecies body of the performers. Working and sharing with these human strangers was an emotional collective journey of care, companionship and support. Letting the other change and transform one's perception - from the way we see co-existence to the way we envision an artistic research process- was expanded into the broader ecological level. These powerful encounters affected our lens on looking at the other as an essential part of being and working. Intimacy with the multispecies body, although it particularly refers to interspecies relationships, invites for more inclusive,

symbiotic lens towards any "other". Working within a group, regulated by care and emotional engagement, proved capable of transforming our perception on living and working with strangers - human and other-than-human -. I consider practicing care within structures and times that idealize individualism as a radical, feminist and posthuman practice, as care is inherently relational (Puig de la Bellacasa, 2017, 73). Learning how to care and practice care with the other, should be considered as tool for sustainable futures of more-than-human relationships.

The employed visual practices, interdisciplinary and body based collaboration cultivated a symbiotic body set responsive to affects, adaptable in its perceptual shifts, from a place of care. This body set is proposed as a state of performing that takes into consideration all the factors -human and other-than-human- that influence its actions and decisions, fostering ecological and ethical approaches in working and living.

2.4 BREATHING MECHANISM AS METHOD FOR SCORE MAKING

While improvisation was the core of our practice, a score was generated as a "safety net" for the artistic research exposition. Due to the different levels of experience on stage among the group, it was necessary to establish certain anchors to

which we can go back to. For this method, I utilized breath as a communication mechanism, integrating its operation within the human body to organize the material generated during our body based collaboration. Thus, from conceptual element, the breathing mechanism became a tool for score making.

As an *inhale* expands the lungs, the first part of the method involved expanding our bodies and relationships in space, allowing for experimentation and interactions with living and non-living bodies. Feedback sessions in form of conversations followed, designating areas and actions for further explorations, recurring tendencies and elements to drop. This distillation, analogous to an *exhale*, constituted the second phase of the method, retaining only what resonated experientially and prompted subsequent investigation. The resultant anchors—actions, relations, and associations—provided spatial reference points, serving as a dramaturgical framework for the research exposition. Beyond the application of the breathing mechanism in organizing our actions in space, breath had also a practical role in the practice. As I mentioned earlier, drawing from my personal experience in practicing mindful breathing in moments of confusion or stress, the recurring reminder to “don’t forget to breathe”, a sentence repeatable during the studio practice and the exposition, served as a prompt to return consciously

to the body- for both performers and audience. Due to its contextualization as interspecies communication mechanism, the presence of the body was identified with its multispeciality, as an essential part to keep performing and living, focusing on the embodied experience.

2.5 PHENOMENOLOGICAL APPROACH AND DISTILLED FINDINGS

The most suitable method for data collection and analysis of the embodied, emotional experience of the participants in the practice was through a phenomenological approach. Conversations offered immediate post-practice insights, while written reflections and questionnaires prompted introspection. The exact questions can be found in the appendix (see A3).

The process I followed was to gather the data and organize them by thematic relevance, particularly for the written reflections, where the participants were invited to reflect on their overall experience, without specific focus. This section is divided in two parts: first I offer insights from the participants in the process and then the audience’s responses. This division highlights how perceiving the body and group as an ecosystem affected the participants’ views. However, while

some insights overlapped, the experience did not have the same impact on the audience, who were participating for the first time.

Participant's reflections

The guided visualization as preparatory activity for the giving-body practice and the body based collaboration was the entry point to introduce the multiplicity and multispeciality of the body through breathing. Through this activity, I wanted to examine how the body will feel or do differently by imagining and conceiving itself as a multiple, multispecies ecosystem.

The analysis of responses showed that the participants felt the vitality of the symbiotic relationships between humans and their others. While they could not prevent organisms to enter their body as breathing is essential, they experienced a sense of acceptance and trust to what was entering the body, while becoming aware of their surrounding environment, something that it was similarly experienced by the audience. Yet, focusing on what enters and exists in the body was not a pleasant experience for everyone, but the biggest part of reflections stated that they soon surrendered to the inevitability of the event. This imaginative journey made the participants aware of their physical inner body, how it looks

and how it feels. Considering the other-than-human within themselves, many experienced an emotional connection to their bodies, while they perceived it as a shared domain. This idea of the body as a sharing space with the other-than-human inspired emotions of closeness and intimacy. The last part of the visualization was inviting the participants to imagine that through exhaling, the particles that were in their bodies they now merge with the breaths of the others in the space. Through this prompt, despite the invisibility of the other-than-human with naked eye, the participants managed to imagine unseen and subtle inter-material connections that were taking place. Additionally, the use of language and the structural elements of the visualization's text generated a sense of care and warmth, which created a protected environment where the audience could surrender to their imagination.

According to their reflections, this activity supplied the participants with mental and emotional material that prompted their action in the giving-body practice and the body based collaboration. This actualization through everyday material was felt as an extension of the inner body to the outside, something that resembled the cyclical process of the visualization. The models and material that were produced in the giving-body practice, the playfulness, slowness and sensorial exploration inspired in the participants

an investigation and reflection of body's interiority and multiplicity, while the familiarity of the material made the process more approachable and introspective.

For the body based collaboration, the prior two practices enhanced the sense of collectiveness and inspired the participants of thinking the analogy between the actual multispecies site of the body with the metaphorical multispecies site of the studio, constituted by different bodies. As they experienced intimacy, trust and acceptance with the body's micro-other, it brought a sense of empathy to the collective body of participants, motivating them to find ways to negotiate their co-existence and co-performance in space.

As facilitator and partial observer of this process, I could see that from early on in the practice, the care and the playfulness the prompts promoted, had enhanced participants' willingness to engage in co-creative actions.

Audience's reflections

While the audience members were up to approximately fifty, the responses I received were only eleven. Although this small number cannot fully outline the audience's experience,

it is valuable to take their insights into consideration for further development and refinement of the practices I propose. To give an idea of the audience's experience before providing their insights, I will first offer a brief description. The audience was seated in the performance space, while the performative sharing of the practice was unfolded around and between them. Sitting in a circle and in proximity with other audience members, performers and material, enabled a sensorial engagement and a sense of closeness the bodies around them. In the installation part, the audience had the opportunity to engage and interact with the materials and the traces of our actions in space, look closely to the non-living bodies and props and taste the edible slime that was available in space. Although the effects of the practices that were employed throughout the research could better unfold through durational engagement and knowledge of the subtext, still the audience experienced levels of intimacy with the bodies around them as well as with their multispecies self. The material, images and information in space were absorbed and "put into practice" during the imaginative journey.

The collective moment of guided visualization brought a feeling of inclusivity and attunement between all the bodies in space, according to the feedback. The awareness of sharing the air with the others created a sense of intimacy, while several audience members experienced the process more as

participants in the action and in the ecosystem was created, rather than as passive viewers, showing a focus on their own and surrounding bodies. Many of them stated that their position in the center of the performance space and between the performers, was an effective starting point to expand the understanding of intimacy beyond the physical proximity. For others, the imaginative navigation in the interiority of their bodies, inspired awareness for their physical body, the other-than-human bodies that inhabit it and the human bodies that surrounding it. While it brought a cognitive understanding of the multiplicity and multispeciality of their bodies and environment, it did not inspire any emotions or sensations of intimacy in particular.

The final question, invited the audience members to reflect on whether this experience shifted their definition of intimacy. For some, intimacy was still something that can only experience with other humans or pets, while the process inspired them to think how this multiplicity can be embraced. For others, and the biggest part of the responses, the awareness of the air as shared space, enabled a kind of intimacy that exceeds comprehension and physical touch. This was referring to the bodies of the others - human and other-than-human-, and for their own body as well.

Overall, the feedback showed both for participants and audience that the practices and the way they were facilitated,

inspired awareness for the multispeciality of the body and the world around them, having an affective and emotional impact on most of them. Sense of interconnectedness, symbiosis and care for the other (human or not) were present in the process, although in greater intensity for the participants in the practice. The phenomenological examination of their experience revealed that, particularly for those who were aware of the subtext these practices were effective in giving an understanding of the posthuman views, while directly addressing the body and affecting their perceptions and actions in the performance space. For the audience, while for a part of them did not have emotional or embodied impact, the practices and the broader environment of the performance space made them aware of their multiple, heterogeneous body on a cognitive level.



CHAPTER 3: DISCUSSION

3.1 INTIMACY AS A POLITICAL GUIDE

This notion of the body as multispecies ecosystem, grounded in both scientific insights, material and imaginative experience, offers practical anchors to posthumanism in sensory, emotional and embodied knowledge. In contrast to scientific data often used for cognitive reflection on distinct species categories, this approach extends the scientific understanding by focusing on the multiplicity and interconnectedness of bodies through embodied engagement. In this way, interspecies relationships became performatively accessible, regardless the background of the practitioners. Looking for intimacy with the multispecies body essentially calls for reflecting and familiarizing with the changeable, multiple body, embracing emotional and sensory engagement. By shedding light to the often invisible and ignored micro-other, the emerged intimacy transformed the employed artistic practices into capable of re-politizing and re-sensitizing scientific knowledge. Through art-science collaboration as method and co-created epistemologies, this research shows how embodied, emotional and sensory knowledge hold equal weight and they are more-than-necessary along analytical data. As scientific data provide information, the engagement I describe throughout provides

the necessary tools to use these data in favor of close interspecies, ecological relationships.

Symbiotic bodyset: welcoming nature in performance

This research ultimately aims not only to redefine the human body from ecological perspective, but to question how intimacy can be enacted with the other-than-human. Instead of working directly with the other-than-human, this methodology generated a bodyset through which ethics of engaging with the other are cultivated and practiced. Thus, the symbiotic bodyset of the body as an ecosystem stands as a performance and working mode for inclusive and affective practices, initiating from body's multiplicity and extending it to a multiplicity of bodies. This brought forward ways to engage with the other on multiple levels and being open and receptive to inner and outer transformations.

3.2 SCIENCE FICTION AND EVERYDAY - REFLECTION ON ARTISTIC RESEARCH EXPOSITION

The appropriation of science fiction aesthetics—evident in choices of props, costumes, lighting and spatial design—recontextualizes everyday performativity, participating in a process of meaning transformation. While utilizing

these aesthetic forms might appear to distance the inquiry from everyday reality by presenting it in an aestheticized environment, its function here is twofold. Firstly, the familiarity of popular science fiction aesthetics acts as a common denominator, introducing an alternative view of the laboratory as a research environment. As this research in general focuses on how to expand the familiar (breathing, imagining, everyday practices and materials etc.) through ecological, posthuman thinking, does so in the aesthetic choices to propose alternative views on the known. Science fiction and the emergent aesthetics, widely used tools in feminist and posthuman discourse and not only, offer a powerful medium for speculating and negotiating current sociopolitical realities. Inspired by its use among artists and writers to envision alternative futures, I employed science fiction aesthetics as means to engage with our current fixed perceptions on the body and the research process. Beyond introducing an alternative perspective by starting from the familiar, the aesthetic of science fiction also served to negotiate and challenge existing power relations.

While conventional science often claims an objective, transcendental view of the world, the employed practices and approach actively transformed such sterile environment - typically regulated by restrictive protocols, as Iris mentioned mentioned, into messy and playful setting. This approach posits that knowledge can also emerge from cluttered and

disorganized environments, utilizing equipment and materials in unconventional ways that stem from the embodied and personal experiences of the practitioners. This was crucial for positioning our intentions and actions within a negotiation between embodiment, emotional, sensory engagement and the disembodied scientific approach. I position this decision as a way to *stay with the trouble* as Haraway proposes, for addressing our profoundly damaged planet, committed in the current reality (Haraway, 2016). By foregrounding the messiness of artistic research and the messiness of the entangled nature of material relationships, at the same time the aesthetic decisions emerge from acknowledging the power and authority of science in shaping worldviews, yet without succumbing to its conventional constraints.

By employing and embracing everyday performativity in the studio practice, turned the everyday into a source for performative actions. Yet, in the exposition of artistic research, the autobiographical elements were not clearly present. As I mentioned in the methods section, the experimental and exploratory character of my approach proved a limiting factor in letting the personal come to the surface. Nevertheless, actions of mothering or breathing in a bag as a regulating mechanism for anxiety, were present in the performance part of the exposition. In this way, such underrepresented experiences were brought in the foreground, to negotiate hierarchies in artistic knowledge. I could see the performance

part of the exposition gaining greater exploration, intention and duration in order the personal element to be more present and clear. Even in this limited exposition of the personal experience, I find it important that these gestures and bodies took space in a public presentation. While the composition and design of the space was a reference to sterile and clinical environments, these actions, as so as the everyday, alternative views and use of scientific props are proposed as an act of reclaiming agency through mess-making and exposing these otherwise private actions of the everyday.

3.3 ETHICAL CONSIDERATIONS

Performing with the other

Working with non artistically trained bodies as so as the sensitive context of the research, brought to the surface ethical considerations in ensuring participants' comfort and in taking care of potential emotional vulnerabilities. As facilitator, my priority was to create a safe creative environment alongside developing the research and process. Through talks in person, addressing personal concerns and limitations, helped me find ways to communicate and support each participant and figure out solutions that could make the process smoother. In this context, I consciously chose to prioritize participant's well being over certain research objectives.

Including bodies that are not coming from an artistic background was crucial to me, as I believe artistic and creative spaces should be accessible to all, enabling expression, creation, learning, and communication regardless their training or previous experience. While this choice might have had implications within the academic setting of this research, it offered an invaluable opportunity to practice symbiotic strategies, rooted in genuine interest and care for (more-than) human beings. Unfortunately, a thesis section cannot fully expose (more-than) human connections of such depth. While the process of learning-with the other how to take care in a creative yet working environment is crucial for my personal and artistic growth, still learning how to research and co-create with the other, is a finding that addresses what posthuman could mean in practice: learning from the other and let them transform the process by being attentive to the relationships that are generated.

3.4 LIMITATIONS

The proposed methodology, deeply rooted in embodied, subjective and aesthetic engagement, inherently resists traditional quantitative measures of effectiveness. Effectiveness here is less about measurable outcomes and more about qualitative shifts in perception, felt experience and cultivation of an intimate relationality. The relative

small number of feedback from the participants cannot be generalized to broader populations. Therefore, the received reflections should be understood as situated testimonies and specific examples of emergent relationality and intimacy.

Despite the limited amount of responses, those provided points for reflections and refinements. Beyond simply sharing the research with the multiple body of the audience, it was important -and partially achieved- to connect and bring the bodies in attunement, as so as to offer the opportunity to the audience as well to sensorially engage with the space. Overall, while this research primarily focuses on the experience of the body, despite the efforts to bring this forward through verbal feedback and questionnaires, the embodied experience is hard to be put into words. Although the importance of emotional engagement between symbionts cannot be stressed enough, fully verbalizing the nuances of this process remains a challenge for written dissemination. Yet, the process opened questions of what intimacy could mean in the relationship with the multiplicity of the body and the realizations that can emerge on a social and ecological level by aiming for emotional relationships with the other-than-human.

3.5 FUTURE DEVELOPMENTS

Conducting this methodology over an extended period of time would enable the observation of its changing impacts, which would be a crucial feedforward for improving the measurement of effectiveness. I speculate that a suitable form of documenting participant's insights in longer engagement would be in form of recurrent interviews, while integrating parts of potential influences that this process could have in their everyday life, possibly assembled in a form of documentary. This medium would allow to captivate the process and how it evolved within time.

Additionally, I would be particularly interested to share the methodology and try it out with several heterogeneous groups of practitioners, possibly including certain communities or individuals that deal with ecological grief or respiration related difficulties. By expanding this research into such contexts, I will be able to not only test the robustness and adaptability of the employed practices but also gather diverse feedback and insights that can profoundly enrich the understanding of multispecies intimacy in action, gathering and bringing forward more personal narratives and perceptions and possibly give visibility to unexposed experiences. Yet, I find it important to share these practices with other art practitioners as well, since they can offer ecological views on working with

material and group settings, in or outside the posthuman context. These practices can propose more sustainable ways in working, creating and living-with human, other-than-human, living and non-living bodies, based on ecological awareness, symbiotic care and mindfulness towards the body and the process.

SUMMARY AND CONCLUSION

Initiating from the posthuman framework, through practices of giving-body, visualization, interdisciplinary and body based collaboration, this research proposes a lived, felt experience-driven approach to this highly theoretical context. The body is not presented as metaphor, but tethered in the material reality is proposed as a site of multispecies co-existence. This approach aims to inspire new perspectives on interspecies relationships and artistic research processes, viewing them in symbiotic and ecological terms. Drawing from the field of biology, interdisciplinary approach shed light to the limitations of science in cultivating holistic relationships between human and other-than-human, which constitute the point of the research's departure. In this light, the proposed methodology constitutes a becoming-with theoretical, philosophical and scientific views. The focus of this research on the embodied experience within the process, indicated phenomenological approach as the most suitable for distilling its findings.

Recognizing the often inaccessible scientific language and the theoretical density of posthuman discourse, this research turns visual and performance practices into vehicles for embodied understanding of the body's multispeciality and its participation in the material interconnected network. The design and the ongoing refinements of the practices infused

with symbiotic views, made notions of relationality, affective agency and interconnectedness performatively accessible to makers, regardless their training or socioeconomic background. In addition, this research in total offers space for subjective perceptions to become present through imaginative engagement and referencing everyday performativity, emphasizing the urgency for embodied understanding. Instead of inventing ways to interact with the other-than-human outside the body, this research focused on re-contextualizing familiar practices, aesthetics and mechanisms of the body that could enhance and infuse with emotional and sensorial understanding the relationship with body's multispeciality. Thus, familiar practices gained depth by taking the multiplicity of the body and the environment as collaborators, extending performance and visual practices beyond representation, into ethico-epistemological modes of learning.

The aforementioned practices along with the emerged idiosyncratic method for score making that is based on the mechanism of breathing, created a frame of cultivating the symbiotic bodyset of affective awareness towards humans and other-than-human in performing and consequently, working and living, highlighting not only the nature-culture continuum, but also the art-life continuum.

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APPENDICES

A1

Link to *SYNTHETIC.SYNTROPHIC.SYMBIOTIC* (2025) documentation.

<https://youtu.be/CNhSscSlvKQ>

A2

Guided visualization documentation score.

January 23rd 2025

1. what the air consists of
2. inhale
3. exhale / [direct name reference](#)
4. [visualization with slime](#)
5. [visualization and movement](#)

May 2nd 2025

1. what the air consists of / [look around](#)
2. inhale
3. exhale
4. [breath is not enough](#)

February 22nd 2025

1. what the air consists of / [look around](#)
2. inhale
3. [microbial community building](#) / [communication mechanism](#)
4. exhale / [direct name reference](#)

April 25th 2025

1. what the air consists of / [look around](#)
2. inhale / [anatomical navigation](#)
3. exhale
4. [breath is not enough](#)

core vocabulary: surroundings, inhale, exhale, trajectories, particles, organisms, history, vitality, diverse bodies, systems, micro-bodies, nonhuman, ecosystem, noble invasion, essential and transformative, air, elastic, multispecies, complex/complexity, connect, living and non-living bodies, symbiosis, nurture, strangers, in and out, memories, awareness, breath.

Final version - May 2nd 2025

[grounding] Take a look at the space around you. Shift your attention to your surroundings. The traces, the memories, living and non-living bodies that constitute your environment. Take a moment to see how you co-exist, the dialogues that are generated between you and your others. Bring your awareness to the complexity of your ecosystem. What exchanges are taking place? How you nurture your environment and how nurtures you back? What are the principles of this symbiosis? Now, you can close your eyes.

[inhale] Holding the memory of your environment, turn your awareness to the air filling your body. What does the air might consist of? What its transparency encloses and what its

vitality makes us ignore? Sense the particles, organisms, history, their histories. Where they might have been before, their trajectories, the diverse spaces, bodies, systems that have passed through, diverse times, eco- systems, lands, industries, pipes. How these microscopic elements in the air meet your body? How they enter, circulate and fill your inner cavities. How they push each other and squeeze together when they enter from your nose, becoming part of your internal world. A simple, noble invasion, essential and transformative. In an inhale notice how your body is flooded by the outside, the vitality of welcoming these strangers in.

[exhale] As you exhale, feel the essence of your inner body reaching outward - merging with the space and the bodies around you. How the memory of your body meets the outer. How each of you generate waves of unique multispecies air. How it blends with the bodies around you. Notice the grainy cloud that circles your body and expands in the space, a network elastic and complex. Bringing together one with the other, the air becomes the meeting ground of countless beings, diverse bodies, particles, organisms, each carrying their own unique experience. Inhale and exhale, as you nurture a long lasting intimacy between strangers, as our bodies slowly meet the ground. Sometimes breath is not enough. But it's a way in and out.

A3

Research questionnaire

1. **What intimacy means to you? How would you define it?**
2. **Did you experience anything similar during this encounter? If yes, could you describe what made you feel that way?** (*This could be related to space, bodies, sound, language, atmosphere, etc.*)
3. **Towards the end of the performance, you were part of a guided visualization. How could this imaginative journey have possibly influenced your perception of your body as a multispecies entity or as an ecosystem?**
4. **Has this experience shifted or expanded your understanding of intimacy in any way?**

In addition to the aforementioned points, the following question was also posed to the research participants.

5. **How do you think the guided visualization contributes to the cultivation of intimacy, particularly as a process of activating the imagination?**
6. **How the practice of giving body might influenced your perception on body's multispeciality?**
7. **In what ways do you think intimacy has been cultivated during our collaboration? How have you observed intimacy evolving within our studio practice?** (you can refer to the engagement with bodies, objects, sharings and practices that we worked with)

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