

A close-up photograph of a green leaf, likely from a rose, showing significant white powdery mildew infection. The leaf's surface is covered in irregular, white, powdery patches, with some small, dark brown spots scattered throughout. The leaf's serrated edge is visible on the left and right sides. The background is a soft, out-of-focus green.

# **ASSEMBLING THE NATURECULTURE GARDEN**

**A Diffractive Ethnography  
of the Utrecht Oude Hortus**

**AMY PEKAL**



Utrecht University

**Assembling the Natureculture Garden:  
A Diffractive Ethnography of the Utrecht Oude Hortus**

A thesis presented by

**Amy Pekal**

**(6853080)**

In partial fulfillment of the requirements for the degree of

**Master of Arts**

In the subject of

**Arts and Society**

Utrecht University  
Utrecht, The Netherlands

June 12, 2020

Thesis supervisor: Prof. Dr. Iris van der Tuin  
Second Reader: Dr. Nanna Verhoeff

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## ABSTRACT

This thesis questions the dominant western narratives towards nature through a situated, diffractive ethnography of the Utrecht Oude Hortus. It examines limitations of the framing the former botanic garden as a record of European cultural hegemony. Moreover, it uses assemblages, naturecultures and heterotopia as a conceptual framework to specifically ask: How do assemblages within naturecultures become visible in the Oude Hortus and how does temporality and care play a critical role in making a possible natureculture garden? In doing so, this body of work recognizes the garden as a capitalist-patriarchal-formation, questions the potential qualities of temporality and of care as dynamic and intra-active forces and proposes an alternative narrative for the garden as one of naturecultures. This thesis is a result of artistic research and situated in the academic natureculture debate alongside the work of Anna Lowenhaupt Tsing, Donna J. Haraway, Karen Barad, Bruno Latour, Tobias Rees among others. It is a result of theory, methodological experimentation and scholarly analysis combined with the artworks, included in the appendix as supplementary evidence. This body of research creates a textured portrait the Utrecht Oude Hortus that imagines the garden as one of naturecultures.

**Keywords:** artistic research, assemblage, care, ethnography, heterotopia, naturecultures, temporality, time.



## INTRODUCTION

As a researcher and as an artist, I am particularly interested in naturecultures as both a phenomenon and a concept.<sup>78</sup> The Anthropocene measures the extent of human impact on the planet, thereby alluding to the human as carrying a central role in geology and ecology.<sup>79</sup> Naturecultures challenges the dominant western cultural narrative (a humanist argument of man as separate from other species) and instead emphasizes the entangled relationships of humans to all life on earth.<sup>80</sup> The academic 'natureculture debate' rejects the binaries between humans (culture) and the natural world (nature). This thesis responds to the ongoing natureculture debate because, as a situated case study of the Utrecht Oude Hortus, it contests the dominant cultural narrative of the Anthropocene. My primary concern is to recognize the historical value of the garden, question its current position and challenge the future societal role the garden can play as a site of naturecultures.

As a visual artist, following an MA program, my research into the limits and possibilities of naturecultures is situated in the field of Arts and Society. I aim at questioning the dominant cultural narratives towards nature, in order to imagine an alternative possibility of living as naturecultures. As an artist-researcher, I act alongside the social sciences to bridge disciplines in the Humanities such as anthropology with artistic practice.

The thesis begins with the theoretical framework, research question and explanation of research methods. I rely on existing scholarship from various genealogies of the Humanities to explore three concepts: heterotopias, naturecultures and assemblages as relevant frames for thinking the Oude Hortus as one of naturecultures. Heterotopias are discussed at length by Michel Foucault while Donna J.

Haraway and Bruno Latour offer political and philosophical critiques of the natureculture distinction.<sup>1</sup> The theoretical arguments of Tobias Reese, Anna Lowenhaupt Tsing and Karen Barad permeate and inspire my methods for analyzing how assemblages are configured and reconfigured in the Oude Hortus. Lastly, the speculative aspects of care in more-than-human worlds are argued in the work of María Puig de la Bellacasa. Their combined scholarship brings together a situated genealogy that supports my position as an artist-researcher alongside not only theory but also other artists whose practices contribute the current debate of naturecultures. In each chapter, I use the concepts of heterotopia, naturecultures and assemblages to play with the aspects of temporality as internal quality of the garden and care as external quality affecting the unfolding of nature's multiple, temporalities.

Chapter one begins with a historical analysis of just how the Oude Hortus is built from a dominant cultural narrative situated in capitalist-colonial-patriarchal formation. I argue that this narrative of scientific process is reductive of life's entangled processes. Chapter two turns its focus to how time in the garden is non-linear and cyclical. Using assemblages of natureculture relating's and figurations, I show how the internal qualities of temporality are dynamic and cyclical. Chapter three builds on the non-linear and external qualities of care to demonstrate the affective and reciprocal practices present in the garden through the community of volunteers. The final chapter concludes with a proposition for the future of the Oude Hortus to become a natureculture garden. In between each section there are fieldnote interludes that capture moments encountered during my research in the garden and allude to the tensions and contradictions of learning to live as naturecultures. The fieldnotes are included here because, academia is reductive, and to produce the least reductive thesis possible, the fieldnote interludes maintain the excess that *is* naturecultures.



## *The Impossible Garden –A Fieldnote*

*Two glass doors open up to the Utrecht Oude Hortus through the reception of the Utrecht University Museum. A foot path of yellowed gravel meets the grey of the interior floor. Directly in front of the entrance is a luminous green grass patch, meticulously cut. Behind the patch of grass are the greenhouses, ornamented with a warm orange frame. To the left of the greenhouses, is a paved patio with tables and chairs arranged neatly in front of the original orangery, now home to the museum's café. Following the grass pad deeper into the garden, the path forks into a loop around the perimeter of the grounds.*

*The gravel path leads between the original building of the botanical institute and herbarium and a large wall of Rhododendron bushes. Out of the corner of my left eye, a large pond occupies the center of the garden. From it, smaller winding stone paths form a web of interlaced routes, crossing through the foliage. They offer various perspectives of the many plants, trees and critters that inhabit the garden. Today, the dance of living and dying strikes a delicate balance. My companions are the early blooming flowers dotting various earthly patches. Among the brush, browned leaves, bright purples whites and yellows signal the promise of another season beginning. Still, it feels a bit too early. The late winter winds test the strength of blossoms fragile stems. Crocuses and snowdrops dance resiliently along with the constantly changing winds, yet some give under the earths pressure and fall flat. This period is where the most polarity is visible: the bones of the trees, the promise of new growth, the precarious search for food by the garden's frequent visitors.*

*The main footpath wraps around the old ginkgo and at the trees right, is an entrance to the medicinal herb garden: the Regius Garden. The footpath winds along the fence of the Regis Garden and turns a corner. To the right of this bend is a small patch of plants that represent the flora of Japan. To the left, an array of species: various trees, flowers, and bushes split to reveal*



*another small footpath towards the central most point of the garden. Here, a small opening of grass looks out onto the pond and the buzzing of honeybees permeate the air as they take up residence in their constructed beehives. Exiting this detour and back on the main footpath, I now pass the second orangery, with large glass windows let in ample sun light from the west, it is the winter home of the citrus fruits and olive trees.*



*In the distance, the volunteers are scattered in the garden. Together with the head gardener, a group of four are busy cutting away the branches of a prickly ash tree (kiespijnboom). One saws off the branch, another carries it away, two more cut it up into smaller, more manageable pieces. I intervene and wheel the thorny brush away. Behind them three more volunteers surround the pond. They rake up the dead and muddy grass and reeds to make room for new growth. Further out in front of the greenhouses, a line of volunteers begins to rake the grass bed. In a militant fashion they work from end to end, uprooting the yellowed blades and miscellaneous leaves. On the periphery of the garden one lone volunteer rakes away the fallen orange needles of the giant sequoia. Another volunteer meanders around the perimeter of the greenhouses, silent-*

ly pulling away loose debris from last week's storm.

The footpath leads to a shady corner of the garden, here the historic gate stoically stands separating the garden from the Nieuwegracht. This corner of the garden features a miniature forest that alludes to the winding routes of English gardens. Just past the secluded space, another smaller meadow leads back to the greenhouses. The oldest greenhouse in the complex contains the remnants of old seeds dating back to 1993, homes of mice, broken overgrown pots, saplings of ginkgo trees, citronella, leaking windows, ivy covered seed draws and a dusty collection name boards that identify the various plant species in the garden.



How am I to build another language for the present natureculture relatings? The fieldwork itself is a negotiation of uncertainties and temporal processes. I get to work, scraping and pulling out weeds. Through my maintenance, I contain that which wants to crawl out, that which wants to be a part of another area. But you see, to let the grass grow rampant would not follow the principles of a neat and ordered garden.



## **THEORETICAL FRAMEWORK: Natureculture Debate**

The current theoretical traditions situated in what I termed the academic 'natureculture debate' support and justify my argument of the limits of dominant cultural narratives towards nature. The current dominant narrative towards nature in the Oude Hortus is shaped by capitalist, patriarchal, and colonialist formations. As trade between the Netherlands and the Dutch colonies in South Africa, Asia and Indonesia grew in the 18<sup>th</sup> century, the Hortus was established as a repository for plant species and botanical research. In the garden, the botanical species (nature) were severed from their local contexts (culture) and classified into a universal system of botanical identification. By considering the Oude Hortus as a site of naturecultures, one can help dispel the dominant narrative that deems the human as separate from nature.

The theoretical framework is set up as glossary to define and explain three concepts central to this thesis: assemblages, heterotopias, naturecultures. In the glossary, I first explain multiple characteristics of an assemblage and how they behave. I then unpack Michel Foucault's concept of heterotopia which is a particular assemblage. I then position the current societal role of the garden in relation to the differing concept of nature-cultures presented by Bruno Latour and naturecultures presented by Donna J. Haraway. The concepts operate as lenses to analyze the garden with. The concepts align with the qualities of temporality and care; the underlying ongoing constants that challenge and question the dominant western outlook towards nature. I conclude my theoretical framework with a conceptual summary, introduce the research question and explain my research methods. Through this work, I make visible the natureculture relations present in Oude Hortus; how they played out in history, how they have changed

over time and why care is critical in reimagining living with more-than-human worlds. My fieldwork and artwork support my research practice of recognizing, questioning, and imagining future possibilities of living-with the Oude Hortus as naturecultures.

### **Assemblages**

Assemblages are both concrete objects as gatherings of things or beings, and transformative processes. They are a critical conceptual tool to think through temporalities and care work as the foundations of a natureculture garden. According to Deleuze and Guattari, assemblages behave like rhizomes; they are non-linear, non-hierarchical constructions with many points of entry and connect on a flat ontological plane.<sup>2</sup> These relational processes are situated in time and space and as Tobias Rees emphasizes; “To speak of an assemblage, is to relate to the present – or some tiny part of it – as if it were a form-in-motion composed of a set of different elements.”<sup>3</sup> Thus, assemblages do not contain static objects, rather each moment is a transformative process of movement. Michel Serres in conversation with Bruno Latour go further into movement and suggest that any one moment in time should be thought of a temporal composite- a form composed of different (disparate) elements moving in time.<sup>4</sup> The processes that occur in the Oude Hortus reflect the innate *relationality* of an assemblage as something that is not fixed and permanent but rather always *moving, mutating and situated* as temporary.

It is in these references of relational nature, as defined by Deleuze, Guattari, Rees, Serres and Latour - who argue that assemblages cannot be rendered as abstract notions but must be made visible, that form the base of inquiry necessary to analyze the garden. In the context of the garden, I analyze the history of relations between elements in the Oude Hortus. As Rees articulates: “how they built up

over time, how they changed - becoming looser or denser, or how the arrival of new elements reconfigured all the relations and thereby gave the assemblage a new, unanticipated dynamic.”<sup>5</sup> For the purpose of this thesis, biological processes of continuous change and growth and the ongoing care and maintenance of the garden are as identified as assemblages. The affect of working with assemblages results in a deeper awareness of the ongoing processes of nature’s cycles; of living and dying and despite past narratives of separating culture from nature, the garden in its fragmentation, gave birth to its own ecology of cycles. Thus, assemblages become tools to critically analyze how the relations in the garden work, who they are enacted by, and how they can be altered.

### **Heterotopias**

The Oude Hortus is an example of a specific assemblage known as a heterotopia; a small space that amasses the various and seemingly incompatible things, relations between things, and temporalities into one place.<sup>6</sup> Michel Foucault introduces the term, *heterotopia* and defines it by six characteristics.<sup>7</sup> Heterotopias are used by every known human culture in the world where the definitive role of heterotopias is “to create a space that is other, another real space, as perfect, as meticulous, as well arranged as ours is messy, ill constructed, and jumbled.”<sup>8</sup> They are singular, physical sites in which several real and imagined spaces are arranged and juxtaposed together, despite being categorically very different from one another. The sites have a precise function and are reflective of the society in which they exist, but their function can change as society changes. Heterotopias are not freely accessible and adhere to a structure of opening and closing. These sites function most effectively as spaces to escape from the tempo of the quotidian. Therefore, within heterotopias, time operates in two ways: it can accumulate through objects collected in the space or be transitory

and give way to ongoing processes of change. In the case of gardens, I argue that time functions in both ways simultaneously, which is not always the case in places such as in museums that accumulate time, or festivals which are temporary assemblies. This interlocation of time within heterotopia requires further examination, which will be provided later on in the thesis. Moreover, the geography of the garden points out how a heterotopia behaves as both a concept and an object.

## 1. INLEIDING



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Situated in the southern end of Utrecht's old city walls, at present, the Oude Hortus is intended to be a reconstruction of the historical phases present in the garden (*maps 1 and 2, Appendix C*).<sup>9</sup> The garden is a physical and ideological relic of history; a story of scientific and societal progress that is rooted in capitalism, patriarchy, and colonialism.<sup>10</sup> A system of de-contextualized, isolated and displaced living things, existing in an unnatural space for the advancement of botanical knowledge. The geographic site is about 1 hectare, or 10,000 m<sup>2</sup>, the grounds are walkable within a few minutes.

Despite its intimate scale, the garden alludes to the vast amount of natural resources, sourced from distant lands and preserved for scientific research and public display. This frame affirms the narrative of a dominating culture that seeks to categorize and control nature, rendering the plants and trees as memorials to the colonization of ecological systems. The geographic site is a patchwork of assembled architecture, histories and living things which have taken on new roles as the function of the Oude Hortus in the city, changes.

TOPONIEMENKAART



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## Naturecultures

Not only is the botanic garden heterotopia, it is also a site of interlaced natureculture activities. In recent scholarship, two theorists, Bruno Latour and Donna J. Haraway have questioned and critiqued the epistemology of separating society from nature and advocated for nature and culture to be considered as bonded subjects. In *We Have Never Been Modern* (1993), Bruno Latour positions his concept of nature-culture alongside modernity's scientific infrastructure. Latour affirms that the "modern" epistemology lacked a vernacular to relate with nature. This was due to the fact that western Europe saw itself as more than a just a culture, but rather as a society that built an ideological binary of 'us' versus 'them'. The 'us' was the west and the 'them' extended out to other premodern cultures and to nature. Pre-modern cultures and nature, the 'them', were classified as all cultures and living beings outside of the 'us' from the west, the modern human equipped with science and reason. The West saw science as clean and separate from its contaminated reality of conquest trade, politics, and ethics.<sup>11</sup> Therefore it constructed a distorted take on reality where science was pure and the western partial perspective was considered to be a privileged one, thus setting it apart from other cultures and from nature itself. Given the great divide between nature and culture, Latour proposes to dissolve the artifact of culture.<sup>12</sup> He argues that an inclusive thought of nature-cultures simultaneously constructs reality: humans are now positioned alongside divinities and non-humans. Nature-cultures renders a new reality of ongoing simultaneous assemblies in relation to one another.

In response to the many emergent epistemological developments surrounding a complex relationality of nature and culture, Haraway engages with the nature-cultures further than Latour's proposition. Importantly, Haraway removes the hyphen between the two

words. This linguistic shift of nature as separate from culture in western sciences, to the relational nature-cultures of Latour, and finally to the bonded naturecultures by Haraway, demonstrates the inseparability and necessary growing commitment of the maintenance and care of such relations.

The term: naturecultures first appears in *The Companion Species Manifesto* (2003). In her poetic description of 'relatings,' Haraway investigates not only the binaries between her species and that of her dog; rather, she builds an entangled perspective, one that constitutes naturecultures as an interspecies relating. She recognizes that both her and her companion are offspring of freedom and conquest, carrying in their bodies the consequences of generations past, that their molecules mix at any physical exchange and that they too embody one another through ongoing commitment and love.<sup>13</sup> Haraway's explanation of companion species extends not to just dogs and people, or cats and people, but all life interacting with love and care for the unity of diversity shared among species. Thus, naturecultures are assembled in layers, not easily separated, and subject to compounding temporalities.

Through conjoined naturecultures, Haraway rejects the humanist ontological split in modern scientific traditions and situates the debate alongside feminist inquiry in order to reject the binaries between man and earth.<sup>14</sup> Therefore, human and plants are coparticipants in the gardens ongoing processes. In the garden, natureculture assemblages are lenses to describe, speculate and prescribe how to gently counteract the logic of the culturally ingrained, but illusive divide between humans and nature. Rendering the human as more important than nature, political, economic and social infrastructures soon positioned dominant institutional ideologies into a human-centric way of thinking.<sup>15</sup> Although the Oude Hortus was built on pillars



of a distorted truth; of a pure botanical science isolated from its entangled reality of naturecultures, the ongoing of biological processes in the garden proved otherwise. The ongoing practices of care in the Oude Hortus, allow for us to conceptually reattach, culture and nature. Moreover, the perspectives of both Haraway and Latour recognize the garden as it was and simultaneously imagine the garden's possibility for what it can become. However, in order to enact such conceptual exercises in the garden, additional tools are required.

### **Conceptual summary**

Assemblages represent the ongoing processes that exist in spite of hierarchical interventions from capitalist, patriarchal and colonial powers. Therefore, assemblages are tools to understand naturecultures. Here, assemblages represent the ongoing and sometimes unpredictable cycles of life and death, that each living element connected to a garden is subject to. Heterotopias are both built up of juxtaposed assemblages and they themselves are a particular assemblage. The concepts of heterotopias, assemblages, and naturecultures challenge the established CPC formations that defined the Oude Hortus of the past. These three concepts lead me ask: how exactly would they support my proposition for a natureculture garden? With these concepts along-side the aspects of temporality and of care, I recognize what occurs in the garden, problematize and question how and why the garden operates in this way, and imagine a future role of the Oude Hortus as a garden of ongoing naturecultures.

## CENTRAL THESIS

The Oude Hortus offers one entry point into the phenomenon of naturecultures. As a garden, it is an essential catalyst to challenge the dominant cultural narratives towards nature. Thus, the central question to my research is:

**How do assemblages within naturecultures become visible in the Oude Hortus and how do temporality and care play a critical role in making a possible natureculture garden?**

Sub-questions:

How did nature and culture split in the Oude Hortus?

How can we frame time in the garden, differently?

How is the garden as a case study, cared for?

How are assemblages in the garden configured and reconfigured?

How do we care as naturecultures in the Oude Hortus and why is this important?

The central thesis supported by the research question encompasses my interest in making visible the roles temp. and care play to imagine the Oude Hortus as a natureculture garden. Time is critical to explore in the garden because it is an internal quality of the garden that is configured and reconfigured. The heterotopia of the garden means that many time scales both accumulate and engage in transient processes simultaneously. Care is an external quality worth exploring because, as both a verb and a noun, it situates the ongoing biological and social assemblages into concrete practices to produce affective and tacit knowledge.

## METHODOLOGY

### Collection Methods

This thesis contributes to the academic discourse of nature-cultures by challenging the reductive methods of doing fieldwork in anthropology. Instead my mode of data collection used artistic research.<sup>16</sup> The main objective of artistic research is to create a space for unexpected conclusions to be made and in that, produce alternative forms of knowledge including tacit knowledge, visual knowledge, affective knowledge, and propositional knowledge.<sup>17</sup> It also gives the possibilities for a sense-driven and material encounter with the world as opposed to an abstract theoretical one.<sup>18</sup> I use writing as a tool to produce one of the results of this artistic research, this thesis text. In undertaking artistic research as a method, I constantly questioned the method's position relative to other methodologies. Thus, through the research process, I rendered a productive doubt; an admittance of unfinished thinking and open-endedness.

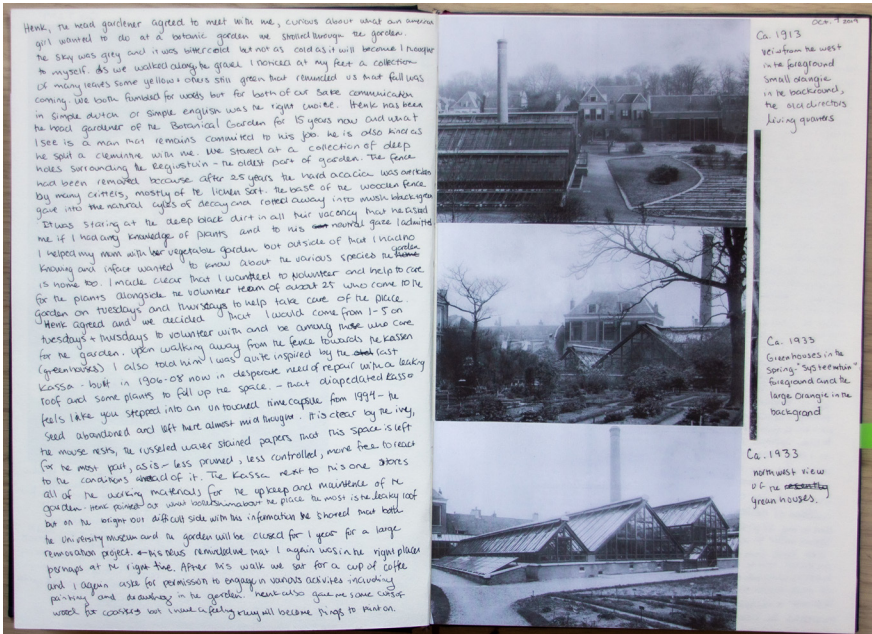
Weekly, for a period of five months, I visited and volunteered at the Oude Hortus. On my visits, I collected sounds, leaves, film and images of the Oude Hortus' changing landscape as it moved through the earth's seasons. The fall seasonal cycle was a prime opportunity to observe the visual changes in the garden and collect an archive of images of the ongoing processes of living and dying in the garden. The data collection methods I practiced were participant observations and the recording of fieldnotes, photographing, and filming encounters based on those participant interactions. I used the strategy of opportunistic sampling; when filming naturally occurring phenomena; a subjective and intuitive way to document unanticipated and poorly understood phenomena as it occurs.<sup>19</sup> This method allowed me to be controlled by the events in the garden and document them. Using on- and off-site drawing, I reflected on certain patterns, themes, and consistencies that

render themselves visible and turned to speculative fiction as to imagine an alternative, garden built of naturecultures.

The Oude Hortus contained in it not only a collection of trees and plants, but also other inhabitants including cats, birds, critters, the visitors and just as importantly the people who take care of the garden. The community I engaged with most in the garden were the volunteers and care takers of the Oude Hortus. The volunteers, made up of mostly retired citizens, reflected a particular demographic of Utrecht, a subset of the city's society. Under the guidance of the head gardener, the volunteers cared for the grounds of the Oude Hortus by raking, digging, pruning, and composting. As part of my artistic research, I conducted narrative interviews which try to find ways of moving vertically through the garden by digging deeper into the nuances of ordering living things, and asking how something is (bound by time and space) and how it is perceived and conceived through an individual's perspective.<sup>20</sup> These interviews were unstructured: conversations that came up during volunteer sessions that were unplanned but then recorded *ad hoc* as well as semi-structured interviews: pre-planned interviews with the head gardener and selected volunteers. The narrative method of the interviews will not produce an established truth or an opinion, instead the knowledge produced from the interviews reflects the search for a contact, connection and contradiction.<sup>21</sup>

The data resulted in an archive of drawings, fieldnotes, observations, interviews, writing, photographs and film collected through multiple encounters in the garden over a fixed period of time. For a reference of evidence (artworks) made during my research please refer to *Appendix B*. The interview topics and pseudonymized interviewee overviews have been gathered in *Appendix A*. With the interviews, I gathered examples that embodied the concepts of assemblages, naturecultures, and heterotopias as well as detailed accounts to support how the qual-

ities of temporality and care are relational and deeply embedded in the concepts. In dealing with the productive doubt of my data, I grew aware that the artistic research practice created a distinctive kind of knowledge, one that was material and medium-specific but also a kind of knowledge that could not stand in for scientific knowledge.<sup>22</sup> The paintings, specifically capture the affect of change within the garden they operate on a visceral level to communicate the complexity and excess that is naturecultures.



## Method of Analysis

According to Barad, knowing is a direct material engagement and an entanglement of subject and object.<sup>23</sup> My approach to using artistic research in the garden came about in dealing with the ongoing reconfigurations between subjects and objects in a bottom-up and non-linear way. Therefore, to analyze the collected data: fieldnotes, im-

ages, films, drawings and interviews, I will use a diffractive analysis that also involves theory. Barad calls the diffractive methodology as one that “does not fix what is the object and what is the subject in advance, and so (...), diffraction involves reading insights through one another in ways that help illuminate differences as they emerge: how different differences get made, what gets excluded, and how those exclusions matter.”<sup>24</sup> For Barad difference is not conceptualized as things separated by preexisting categories, rather the definition of difference alludes to the Deleuzian understanding of difference as positive differing. In this way, difference is akin to the processes of life itself: “an effect of connections and relations within and between different bodies, affecting and being affected by each other.”<sup>25</sup> Moreover it is “a method for theorizing the relationship between “the natural” and “the social” together without defining one against the other or holding either nature or culture as the fixed referent for understanding the other.”<sup>26</sup> Because diffraction does not separate subject from objects, this method is most appropriate to analyze my collected data.



A diffractive ethnography's unit of analysis is not the community but the phenomena at hand.<sup>27</sup> In regard to the phenomena of naturecultures, a diffractive approach resists the dominant anthropocentric, capitalist, patriarchal, and colonialist formations that shaped the Oude Hortus' existence so as to acknowledge the embodied involvement of natureculture assemblages and their capacity to change in the garden. Building on Barad, Hillevi Lenz Taguchi emphasizes that a 'Diffractive analysis' makes us aware of our embodied involvement in the materiality of the event of analyzing data."<sup>28</sup> I will read the paintings, fieldnotes and theoretical scholarship through the textual evidence from the interviews to arrive at speculative possibilities for framing the garden, otherwise. Using a diffractive analysis, I will make three critical moves to illuminate how the material encounters in the garden produce affective differences, specifically; differences entangled with the changing role of the institution (in the history chapter) and the ongoing qualities of time and care in the garden. These moves frame temporality and care as more than concepts, they are also notable aspects or qualities of the garden that operate 'intra-actively'; inseparable from assemblages, heterotopias and naturecultures.<sup>29</sup> I will use the interview material by coding the interviews through a self-generated code (*Appendix A*) which highlights the concepts and qualities of the garden that I want to dig deeper into, specifically; how the various processes, objects and subjects as indistinct from one another are perceived from the interviewee's perspective. The interview fragments are fundamental force in uncovering a reality, not yet made visible of the Oude Hortus but that exists among the multiple encounters with the phenomena of naturecultures. Importantly, in order to utilize the interviews as such, I also needed the other data gathered during my field work.

## *Divided Memorials– A Fieldnote*

*It is a warm, late summer day. I walk into the garden to find Honey digging in the Regius Garden. She busies herself weeding unwanted flora and rearranging the fauna. Situated at the southern perimeter of the Hortus, The Regius Garden is bordered on two sides with a high brick wall dividing properties. On the other side of the wall, are the gardens neighbors in close living quarters. Built in 1723, the garden of medicinal plants is the oldest part of the Oude Hortus. It is organized into small contained squares and ordered according to ailments; plants good for indigestion in one allotment, fevers, cough, woman's herbs, bones in others. Plants are forced to co-exist with one another for their medicinal and research-worthy properties. The organization and categorization of this feels forced, ordered, clinical. At the east end, under the fig tree is a cement bench which the ginger cat favors. Sitting on this bench you can hear a polyphony of sound textures from the wind, the distant city, the crows, among other passing sounds. I take refuge on the bench and think back to some weeks ago when I helped dig up an old stone path that lay under the Acacia wood fence dividing the Regius Garden from the rest.*





*Honey keeps digging, seemingly unaffected by my presence. The Regius Garden is her territory, she committed to caring for it for over 20 years ago. In many ways, the garden is sentimental. She studied biology in this building and now returns to tend to the same grounds that nurtured her own acquired knowledge. She diligently cares for the past of the garden and its present-day growth, keeping the weeds at bay, removing unwanted stems and shoots.*

*The garden passes through its own temporality dictated by cycles of growth, decay, and regrowth. The American pokeweed, *Phytolacca Americana* catches my eye. From my memory, it was a weed that quickly populated the alleyway between our and our neighbors' homes. The crimson stem here is peculiar in a sea of green growth. Weeks later the vibrant color will react to the cold and drain back into the core of the plant, patiently awaiting the warm and favorable growing conditions of spring. In the winter, the desolation of life patiently awaiting the cycle of spring make it possible to observe the anatomy of the trees, to see their scars from ongoing pruning, cutting and redirection of energies. The stems, cut off from life will appear brown and yellow, drained from their once robust hues by late February.*



## 1. CAPITALIST- PATRIARCHAL- COLONIAL FORMATIONS

Framed as heterotopia, the Oude Hortus is an assemblage of figures inclusive of all things living and non-living that temporarily inhabit the space. From this position, the garden has the capacity to juxtapose seemingly disparate elements together through several real and imagined spaces simultaneously. The Oude Hortus has a precise function that is reflective of the society in which it exists, but its function can and has changed alongside the evolution of society. In the garden, dominant cultural narratives permeate the historic value and purpose of the Oude Hortus. From ca. 1600 onwards, The Netherlands embraced the process of modernization and established the cultural ideology of industrial society, based on capitalist-patriarchal-colonial formation (CPC).<sup>30</sup> In the process of modernization, a direct structural violence was necessary to separate, nature, humans, and other colonized parts from the whole of the planet.<sup>31</sup> The Oude Hortus was established alongside this period of modernization as part of Utrecht University in the height of Dutch botanical explorations (ca.1600-1850). Plant species were brought back on trade ships from the Dutch colonies in Indonesia, South Africa, and Asia. Upon receiving the plants, the research facility dedicated itself to the scientific study of plants by dissecting symbioses of both biological and social systems and establishing dichotomies between man and nature.<sup>32</sup> In doing so, it established a dominant and reductionist principle of science, that was used to control and conquer nature.

The garden soon became full of amputated parts of ecological systems, juxtaposed together. Nature in the garden became objectified and considered for its instrumental and utility value. This was the established system of education and thought by which botanical science was predicated on. Therefore, empirical science is never pure nor neu-

tral, rather it was imbedded with power relations, colonial conquests and economic motivation rendering a particular way of looking at the world, of understanding nature.

### **Linear History**

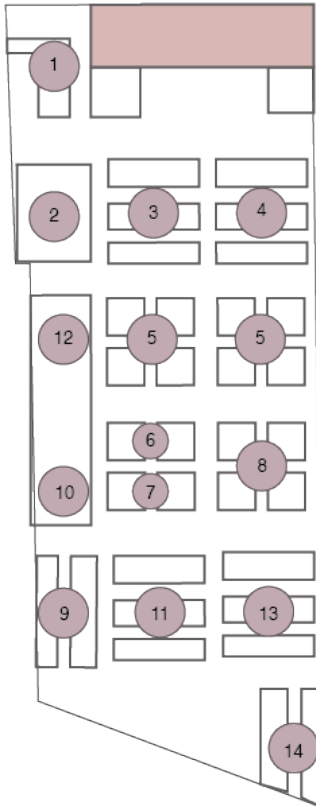
The oldest section of the garden is the Regius Garden (*Regius-tuin*), named after the Utrecht University's first professor in plant sciences, Henricus Regius (Hendrik de Roy, 1598-1679). In 1639, Regius created the first academic medicinal herb garden located in the Sonnenberg- a nearby stone fortress and observatory. However, to keep up with growing botanical expeditions, the city of Utrecht bought the land where the Oude Hortus is located today. The Regius Garden was built in 1723 and Joseph Serrurier (1663-1742), professor of botany at the Utrecht University at the time, was appointed to set up the garden.<sup>33</sup> The Regius Garden, through the years became a living memorial to the advancement of western European biological science. According to tradition, the plants were arranged by ailments and disease, they were divided into in metric sections with many paths in between to ensure each plant was high visible.<sup>34</sup> The flower beds were designed in a formal, linear architectural style that reflected the ideologies of the humanistic circles whom were associated with the pedagogical and moral representation of discipline and order.<sup>35</sup> Thus, this site embodies the longstanding binary between nature and culture.

The Regius Garden carries with it a set of cultural values that establishes a CPC comprehension of nature which operates on the predicate of the generalization: for a universal *Nature*. The Oude Hortus is a site prone to the process of generalization because it was established with the goal to unify diversity of plant species under a universal system of classification. According to Tsing (2005), the process of generalization requires a large perimeter (universal), an 'axiom of unity' of

which the particulars fit into and are made compatible.<sup>36</sup> Botany, seen as an axiom of unity, turns the often incompatible and varied knowledges into convergent, accepted opinions. In the process of generalization, convergence and compatibility do not work separately, rather they cover each other up.<sup>37</sup> Thus, a generalized CPC comprehension of Nature aims to create a universal out of accumulated and fragmented particulars made up for people and plant relating's.

Around the time of botanical gardens flourishing throughout Europe, Carl Linnaeus (1707-1778), who visited the Utrecht Hortus in 1735 and known as the Swedish father of modern biological classification claimed that: "The system takes precedence over the plant, as well as the process through which that plant was gathered 'out there.'"<sup>38</sup> This account affirms the process of generalization in botanical science. Moreover, it validates the cultural (CPC) hegemony of Europe in the advancement of botanical knowledge and the slow dissemination of non-European knowledges. Botanical explorations required collaborations with indigenous communities. Yet, in the cultural history of botanical explorations, European botanists wrote about plants but not of the people because in order to count as scientific samples the biological material had to be purified from its context.<sup>39</sup> By isolating species from their contexts and communities, European Botanists covered collaborations between communities and cultures of the plants and standardized difference among the many knowledges of plants. In doing so they also erased the practices of care and respect one has for the earth and all of its inhabitants. Born out of CPC structures the garden played a role of whitewashing biodiversity into a classifiable system and splitting the diverse details of nature from the cultures of which they were deeply embedded. The people plant relations that thrived in harmony with nature were hidden away, and along with it; a trust for natural processes, cycles and conditions.

In an effort to preserve the empirical scope of botanical knowledge, the Regius Garden reconstructs the intentions of the 18<sup>th</sup> century. *Map 3, (Appendix C.)* shows the garden as divided into a grid of fourteen aliment-specific sections; arranged together in groups of either two or four and divided by walking paths. To the right of the entrance, an arrangement of herbs for dental and mouth conditions (4) is followed by herbs whose properties help with fever and inflammation (3). The numerical order of the garden snakes through each section. Herbs dedicated to the respiratory system (5) occupy the most amount of space yet the last section of the garden, off in the far corner is dedicated to women's herbs (14). The logic and order of this garden is organized by difference as a system of separation and division. The plants are removed from their original contexts and ordered according to their utility value, on the basis of a universal system of botanical classification. The role of botanical study created a distanced social conscience from nature and thereby influenced present day relations with plants as instrumental resources to be studied, conquered, and cultivated.



## Repositioning the Value of the Oude Hortus

While the infrastructure of the oldest part of the garden, the Regius Garden embodies the natureculture divide, the other parts of the garden have, been torn down, rebuilt, planted, removed and thereby contribute the complexities of naturecultures in this geographic site. The changing role of the Oude Hortus through time does not embody difference according to separation between categories but rather through a relational ontology constituted by the ongoing processes of change. In 1985 the research facilities of Utrecht University's the botanical institute moved to Utrecht University's Uithof campus. This account exemplifies the temporal assemblages present in the garden, during a period of ambiguity and uncertainty of the Oude Hortus' role a historic garden and as a heterotopia over time. Thus, the usefulness of the old botanic garden was rendered no longer valuable in the same way. During the five-year long move the fate of the original Hortus was left to negotiations between the city, the university, the neighbors, and the workgroup: *Toekomst Oude Hortus Opgericht*; a self-organized group of garden care takers and supporters. In this ambiguous period, the garden was at risk of being turning into a parking lot, but the university buildings were of great interest.<sup>40</sup> Thus, the University Museum moved their operations into the old biological institute and with that, also acquired the old botanic garden. In its most uncertain state, the Oude Hortus required social collaborations to ensure that it still was a part of the city of Utrecht's cultural identity. However, the notion of naturecultures was not addressed in this period. The space was dominated by culture, and what was left of the garden- mostly the trees and architecture, was seen as a site which could not flourish without human intervention.

The Oude Hortus was always a part of the institution. The garden would not look like the particular space it is today if weren't for the University Museum who elected to move its facilities into the old botanical institutes building, and by doing so also acquiring the grounds of the Oude Hortus. In a historical



analysis of the Oude Hortus carried out by Utrecht University in partnership with Debie & Verkuijl tuin park landschap (2019), the analysis evaluated the present design of the Oude Hortus and the cultural value of the garden. Following the acquisition of the garden by the University Museum, the landscape company, Copijn was appointed to redesign the garden. *Map 4 (Appendix C.)* illustrates Copijns design of the garden which intended to represent the historical phases of the Oude Hortus. However, based on the historic evaluation, Copijn's





design is generalized does not accurately reflect the historical position of the garden.<sup>41</sup> Instead the design is a romanticized interpretation of a garden but as a whole, it lacks its historical-spatial characteristic and architectural refinement, a principle characteristic of nineteenth century landscape construction.<sup>42</sup> The analysis argues that the Hortus, in its present design is no longer an accurate representation of the historical natureculture divide. While this may compromise the site's historical significance, it also liberates the garden towards a possible, alternative identity. The garden has the potential to be a garden of naturecultures, dedicated to temporal collaborations between species through the maintenance and care of this particular site.



## **Between the Institution and the Garden**

At present, the Oude Hortus cannot exist as separate from The Utrecht University Museum yet the relation between culture and nature is constructed on the basis of difference; one as separate from the other. The institution is a heterotopia of categories to order knowledge according to these differences. Barad argues “a scientific realist believes that scientific knowledge accurately reflects physical reality, whereas a strong social constructivist would argue that knowledge is more accurately understood as a reflection of culture, rather than nature.”<sup>43</sup> The dominant narrative from the institution frames the garden as a space to study a top down notion of difference through categories rendered as objects of memory and colonized ecological history. Thus, the living processes of the garden, embody another type of difference that is best analyzed diffractively because as a bottom-up type of difference, it is entangled with the changing role of the institution and the ongoing qualities of time and care in the garden.

My interview with Henry, the head gardener through fieldnotes gathered from encounters with the University Museum’s administrative department to show how difference is made and entangled with tensions and contradictions between the garden and the institution. The changing role of the garden is made visible in its transformations. The identity of the Hortus moves from an educational institution to an abandoned and ambiguous space cared for by the neighbors to a private, yet nominally public institution.

The museum is alas one of the many nominally public institutions that has fallen into the rhythm of logistical capitalism, meaning the institution measures their numbers and projects goals of infinite and ongoing possible growth in visitors.<sup>44</sup> The entrance to the garden requires visitor to enter through the museum and pay a small fee. Finances and economic feasibility establish the museums system of val-

ue. If something needs to be done or changed in the garden, the first question is, in Dutch: *“Wat kost het?”* If there is money available for the garden, then projects can be done. This institutional practice of economic valuation is a top-down affirmation of ongoing CPC formations that gives little consideration to the biological process and practices of past and present that fuel the garden itself.

The gardener’s way of navigating and working within the garden is emphasized through acts of care. Henry refuses to fall into the pressures of an institutions operational and logistical capitalism which treat the plants like objects in the museum’s collection. Instead he creates his own schedule of care and maintenance required for the garden to flourish. When asked about his position in the garden he elaborates on his complexity as situated between a western construct, affirmed by the museum’s operation dictated by logistical capitalism and the ongoing, bottom-up processes of life in the garden:

*“Ik voel me heel erg verantwoordelijk hier, but also in the weekend when there is a storm, I go to the garden, or I call to the reception desk, Ramen Dicht! Or close the garden! Because of falling trees. Het is te gevaarlijk. Or in the summertime, I cannot say oh it is Friday I go out for the weekend and there is no one to water the plants here, then they all die on Monday. But they don’t understand that here. Is het nodig? Waarom moet dat? Ja natuurlijk dat is tuin. Ze miste de feeling. Nou wel leuk de hortus maar, they do not have the real intention.”<sup>45</sup>*

In order to express himself, Henry moves between English and Dutch. As he discusses his responsibility the care of living things, he alludes to making of affective difference. In the garden, he relates to the connections and relations within and between different bodies, both human, plant, and institutional bodies which in the Oude Hortus, affect and are affected by each other. In this fragment, Henry projects the loss of un-

derstanding for living and dying in plants onto the institution. His tone grieves the lost connection humanity once had with nature. Henry's responsibility to care moves beyond contracted paid hours because caring for the garden is an ongoing process involving the plants, the volunteers, and then the institution. This fragment from the interview renders Henry's perspective as partial and incomplete, however this knowledge is necessary in the becoming of naturecultures as I have come to understand while collecting other materials in the garden.

Through this encounter I have introduced care and time as qualities in the making of a natureculture garden. The historical account of the garden depicts the limits of the dominant and yet partial perspective towards nature instituted by CPC formation. This partial perspective offers a limited and narrow scope to learning from plants about our culture's own place in the world; as a participant in life's processes. Henry grapples with the current obstacles of becoming naturecultures. His relations to the institution, alludes to the difficulties in closing the nature culture gap when cultural, institutional and physical infrastructures relying on capitalism insure otherwise. The relations between the garden and the museum, are messy, unclear, and the cultural expectation for institutions of education to have the natural world's best interest in mind, is compromised. Due to the complexities of institutional politics, capacities, responsibilities and power relations, the effort to close the natureculture gap is thus, met with friction.<sup>46</sup> However, bottom up practices, specifically the care and maintenance of the garden allude to the possibilities of living in harmonious naturecultures. Efforts to close the gap between nature and culture are enacted through care-work and subject to time. By situating the human interspecies as subjected and bonded to multiple time scales, I invite you to look at the quality of time as not linear but as a dynamic and multidirectional process.

## Weaving Time– A Fieldnote



*The Ginkgo grows at the south west corner of the Garden, its thick trunk and meandering branches render visible the wise old age of this living fossil. The tree is subject to its own transformations, seasons and cycles and exists in relation to three centuries of Europe's Social Histories. I walk up to the tree's large trunk and embrace its resilient form. Around me, cover crops shoot shallow roots into the earth. English ivy winds its way through the foliage and fixates itself onto the ginkgo, meandering upwards. A moist climate and wet weather conditions invite green moss and lichen to take refuge on the ginkgo's woody exterior. Large entangled forms of the tree's thick trunk spiral and branch outward to catch the sun's rays. Steel wires tie together the most precarious of branches to decrease probability of the tree breaking in a storm. From the steel bands, I trace the outlines of one peculiar branch. From it, hangs a bushel of ginkgo seeds, hundreds of them. The seeds only grow in \*

*this part of the tree because in 1930, researchers grafted on a female branch to the male tree. This fact, too sits a bit out of place, cut and tucked into this narrative. As the seeds begin to fall the smell of them is putrid and permeates any fiber that touches it.*

*To bear the winter conditions, the Ginkgo's life processes recede back into the trees core. I inhale deeply and recall that the ionic golden yellow leaves of the ginkgo which stayed until last November. It began at the edges of the trees leaves; day by day the green colors drained from the leaves and was replaced by a distinctive golden hue. The golden yellow leaves fell from the tree gradually and piled up around it. They soon began to decompose; trading vibrant yellow hues for more muted browns, drying up and disintegrating back into useable nutrients for the tree and the surrounding vegetation. I close my eyes and with my hands around the tree, exhale.*

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*Its 1738, the tree is not yet here. The garden is small and only accounts for the medicinal plants. With each distant botanical expedition, the demand on the garden to chart, annotated, and classify our growing collection too, increases. Before the trade ships have arrived from the east, The Hortus received a letter noting of a curious specimen – a sapling with fan like leaves and some two dozen seeds have survived the journey. It is said, the tree can live for 2000 years. Surely a specimen such as this, must be planted in the collection of the Hortus Botanicus, it is a pity that Carolus Linnaeus had recently concluded his stay and cannot see the new addition. When the sampling arrives, let us be sure to plant it near the medicinal garden, so that its branches catch the warm afternoon light, year after year.*

## 2. TEMPORALITY

One of the current roles of Oude Hortus, is a place to escape the quotidian of daily life. The garden is surrounded by historic buildings and nestled in the quiet of the city's museum quarter. It is open year-round for visitors to walk through and observe the gardens collection of living things. In the garden, human centered historical time collides with geologic time. However, rather than multiple temporalities coexisting, geological time is covered up and dominated by the time scale of human world history.<sup>47</sup>

The institutional organization of this particular 'botanic' garden narrows and limits our understanding of temporality by reducing and displacing time away from context of geology; earth histories and the ecologies of interspecies entanglements, into the language of western world history. The complexity of time is reduced to the sum of its parts, the past and future are framed as uni-directional, and in doing so, nature and culture become further divided.<sup>48</sup> To challenge this, I examine time as a dynamic condition where elements, processes, objects and entities in the Oude Hortus are subject to multi-directional and overlapping temporalities. The inhabitants of the garden engage in process of change that demonstrate the intra-active, cyclical and dynamic forces of non-linear timescales.<sup>49</sup> Therefore, by making multiple *times* visible means that we, working as naturecultures, are capable of challenging and reconfiguring the Anthropocentric understanding of time.

In a heterotopia, time operates in two ways: it accumulates through objects collected in the space (top-down science), and it is transitory and gives way to ongoing processes of change (bottom-up naturecultures). In the case of the Oude Hortus, time is both cumulative and transitory. Cumulative and transitory timescales are non-lin-

ear conditions often requiring collaboration between players including climate, seasonal cycles, other inhabitants of the garden, visitors and care takers.<sup>50</sup> The assembled living plants and trees are framed to preserve the human history in the scope of the scientific process specifically in regard to botanical knowledge: a distinctly western European method of classifying and studying living matter. However, the shifting role of the garden in the city of Utrecht from a site of research progress to a site that was abandoned and then finally reemerged and noted as a site of cultural significance presents the opportunity to reevaluate the temporal relating's in the garden. This configuration and entanglements present can be considered intra-active and emerging from constantly changing assemblages.<sup>51</sup> In contrast to the partial dominant perspective of human history, geologic or earth time is dynamic and multidirectional. The Oude Hortus then, is inclusive of many timescales appearing as living figures, such as the old ginkgo, processes of framing time such as the *Chthulucene*, and multispecies intra-actions though direct and indirect processes.<sup>52</sup> In this chapter I will successively discuss the figuration, framing and intra-actions as to show the various of timescales already present in the garden.

### **Cumulative and Transitory Time**

Situated outside of the entrance of the Regius Garden stands the *gingko biloba*, one of the oldest trees in the Netherlands, is a figuration of cumulative and transitory time. At 270 years old, it merges past and present together and embodies geologic time scales and human history colliding. A living monument to trade relations and extractive tendencies of the west, the arrival of the ginkgo was a result of the Dutch trade connections with Japan. The tree was planted somewhere between 1730 and 1748, making it the oldest ongoing, living thing in the garden.<sup>53</sup> It has borne witness to the ongoing social and ecological



transformations within the city of Utrecht. For many of the visitors and volunteers, the old ginkgo is inscribed with a special cultural significance, a distinct value to the social history of the garden, surviving almost three centuries of European progress, war and development.<sup>54</sup> This human scale history that recounts the spread of the ginkgo species throughout Europe and the Americas correlates with an anthropocentric measure of time and human intervention.

What can we learn from the ginkgo about time? With the ginkgo, we can read geologic time scales and human time concurrently because its species dates back 250 million years.<sup>55</sup> The tree is a figuration of cumulative time in regard to geologic time. In almost unnoticeable increments, the ginkgo gains another ring around its trunk, growing thicker and more complicated than before. Known as a living fossil, the species flourishes resiliently alongside humans living in urban environments. In the span of two hundred years, the *ginkgo biloba* species was bred and planted in urban areas throughout Europe and America. Today, these resilient ginkgo trees line the city streets of Utrecht and many urban areas of the world, yet these trees do not receive the same attention as the unique old ginkgo situated in the Oude Hortus. The species repetitively proves tolerant of pollution, climate extremes, and disease, making it a suitable for living-with humans as naturecultures.

The ginkgo is figuration of transitory time through its ongoing seasonal cycles and volunteer's commitment to care of the old ginkgo. The temporal processes are dynamic and cyclical. As it moves from through seasons the tree changes, it blooms, new leaves flourish, it extends its branches and in doing so, the ginkgo is grafted, tied, and cut back on numerous occasions. In spite of the physical alterations to its branches, the tree continues to grow away from the buildings in favor of the sun. In the fall, the ginkgo turns a golden yellow. As it sheds its iconic leaves, the volunteers pick them up compost them. In winter

season, the ginkgo drops its seeds and the head gardener assigns the task of recovering the fallen seeds to a few willing volunteers. Together they sit on small stools under the barren ginkgo tree with small pales and shovels collecting the fruit of the tree. The smell is putrid; like that of day-old beer and vomit. Still the seeds are collected, washed, dried, examined, and sent to the university botanic garden for storage and propagation. This intervention displaces its kin and prevents the seeds from taking root at the base of the tree. Nothing in this process is permanent. Thus cumulative and transitory time is configured and reconfigured.

### **Collapsed Time**

In order to make visible the entangled complexity of the ginkgo with the various timescale at play in the garden, I turn to Donna J. Haraway's concept of the Chthulucene as a frame. The Chthulucene employs a timescale of collapsed, non-linear time to frame the intersectional and ongoing process of living and dying in the now.<sup>56</sup> Because of its situatedness, the ginkgo engages with role in both the site and as a participant in biological processes.

As a geographic site, the Oude Hortus is an artifact of the anthropocentric way of thinking. For Haraway, the Anthropocene does not address cyclical ongoing processes, it only tells a partial linear history, one that accounts for species man.<sup>57</sup> The Anthropocene does not acknowledge that history must hold space for the web of multi-species relations. Thus, the field of scientific research as demonstrated by the nature culture divide is burdened, thinking strategies are limited and filled with individual competition. Finally, the term Anthropocene is used by people of privilege, mostly white, from the global north and doesn't represent inclusive perspective and is therefore not representative of the diversity of nature.<sup>58</sup> In short, the Anthropocene

offers a limited capacity to see beyond the species man, limited capacity to imagine new possibilities of being together between species, of “becoming-with” towards restoring life on this earth.<sup>59</sup> Therefore, at present, the Chthulucene is a more appropriate timescale for the Oude Hortus to embody natureculture relations.

The Chthulucene is an ongoing a period that cannot be made tangible or empirically measured. It is supported by an armature of complex, non-linear processes that compose a living planet. These processes account for both biological systems and structures of social organization, as made visible by the organization of the Oude Hortus. For Haraway, two critical concepts, tentacular thinking and string figures are necessary to understand the Chthulucene and how in fact, one could imagine a garden of the Chthulucene. Tentacular thinking is to consider that all parts of living beings form an interconnected system, rendering an interspecies reality visible. This shapes a reality between species that is non-hierarchical and situates everything in relation to one another. Haraway describes string figures as the beings that transcend old dichotomies and models of thinking.<sup>60</sup> They instead engage in an active process that decentralize learning and enhance our capacity to see the bigger systemic change that is in fact needed. The Oude Hortus is filled with string figures. They come in many forms including artists, humans, birds, animals, plants and deities, and symbols and they interact with one another within a non-linear time scape. String figures help take the concept of tentacular thinking from the abstract by way of many figurations. In the frame of Haraway’s thinking, the old gingko tree is only one of the many string figures present in the garden.

In my fieldwork, I recorded examples of these string figures at work. Through drawing, painting, and participant observation, I analyzed the temporal dimensions present in the Oude Hortus and how these in effect, speak of a shift into naturecultures. Karan Barad

describes ongoing processes as intra-actions in which individuals do not preexist as independent entities rather, they come into existence through their relatings.<sup>61</sup> In the Oude Hortus, natureculture intra-actions are continually redefined occur through the multiple, temporal string figure entanglements. On Tuesdays, about twenty-five volunteers come to the Oude Hortus to dedicate their time to the maintenance and care of the garden and for some it is a reoccurring practice for over fifteen years. Through human intervention and maintenance, intra-actions between naturecultures are made visible in two overlapping speeds. The first is the direct effect that results from altering the garden by cutting, pruning or weeding a site. The second, a more residual, indirect effect in which the processes of growth and transformation occur over time. These natureculture assemblages engaged in the processes of ongoing are rendered as an indiscernible intra-action between past and future through cyclical processes of growth, death, decay. Thus, through gingko-human relatings, we learn to work with ongoing cycles.

The process of building a painting forced me to look at the garden as a system of string figures where relations are composed moments of interaction. The works attempt to hold in place continuous change. Each work is painted over a span of four to six months and the images are informed by the changing landscape in the garden. Some of the paintings record specific moments of transition such as the shift in seasons, while others embody growth over time. Thus, the static paint on a surface is capable of evoking evidence of constant activity and movement. (*Undergrowth* 2020; appendix B.) responds to the seasonal processes and cycles of living and dying in the now.



Undergrowth, 2020. Oil on linen, 70 x 80 x 4 cm © Amy Pekal

The painting depicts details of the cover crops found at the base of the old ginkgo, as the climate transitions from fall to winter. The botanical elements of the painting are rendered with the intention to compress the background and foreground of the picture plane and embody the ambiguity of living and dying simultaneously. Snaking through the center of the composition is a fern leaf. The vibrant green hues have receded into the plants stem and at its edges, the leaves curl a dark brown. Ivy litters the earth around the plants and covers the decaying foliage. The mild Dutch winters keep the deep viridian green of the english ivy present year-round. Painted between the fall and winter, this image is an example of an ongoing process of change. It depicts the earths capacity to be both alive and dead, but death is

not the conception of death like humans consider it, in contrast, death in plants is part of the garden's inherent cyclicity. The string figures that make up the ecosystem under the shade of the old ginkgo constantly negotiate their relations.

Although *Undergrowth* does not directly depict human activity in the image, the source and reference material of the work, do. The painting, among others in Appendix B., are shaped by the intra-active, naturecultures present in the Oude Hortus. The string figures in this particular relating are the visitors, the volunteer caretakers of the garden, the ginkgo, and the biological ecosystem of other plants, critters and animals that surround the tree. These string figures, entangled and collaboration with one another, engage in dynamic and cyclical processes of ongoing.

A western and linear conception of temporality offers a limited outlook, by framing the processes in the garden as subject to historical time which cover up geologic time. The various timescales already present in the garden, dismantle the dominant structure of time as linear and fixed in increments. Non-linear timescales broaden the possibility of becoming naturecultures by examining how multiple timescales are inseparable from the condition of care carried out by the volunteers of the Oude Hortus. The multiple timescales give space for collaborations and continuous relating's between species to occur. Cumulative, transitory and non-linear time is entangled with the qualities of care in the Oude Hortus and relates to the urgency of living as naturecultures.

## *Caring for Living Objects– A Fieldnote*

*I open my eyes; the sky has turned a dark grey and it begins to rain. In an effort to escape the wind gusts that periodically plague this flat landscape, I seek refuge inside the historic greenhouses on the opposite end of the garden. Here the temperature is noticeably consistent, at 16 degrees Celsius, the foggy windows blur the outside world. Once inside the inviting warmth of the greenhouse, I slow down my hurried steps and begin to walk curiously around the room's perimeter. With my finger, I trace the edge of the table-like structures. They are built into the architecture and resemble a shelf. Depending on where one looks, they are filled with soil, sun bleached shells or gravel. On top, sit dozens of unidentified potted plants, and among them scattered succulents, aloe Vera, orchids and speckled begonias.*

*Built in 1908 the greenhouses are modeled after train stations, with long corridors. The glass is held up by an armature of blue steel frames, bordered by a warm, burnt orange painted teak wood. At present, the greenhouses contain: a storage tank of water, two ponds, palms trees, low maintenance plants that require warm climates and some tables and chairs.*

*I make my way around the greenhouses. A floral aroma mixes with the humidity from the hissing sprinklers and water pipes. The climates change as I move from room to room. It begins humid and then as I turn the corner, my body is met with a dry, arid climate. The succulents that are planted on the tables surrounding the pond are in mid bloom. They punctuate the dull concrete slabs with muted pinks, greys, greens and blues. As I walk between the succulents and the pond, I let my hand hover above the water. Curiously this triggers the bright orange fish to rush to the surface of the water, in hope of food. Alas after a second they realize I come with empty promises and they regress back into the murky water. I squeeze through a small corner- small only because a large potted sugarcane plant that has outgrown its pot.*





*Deeper into the greenhouse, Norman stands on a ladder pruning back a passionflower (Passifloraceae) vine that has generously spread its way out across half of the greenhouse. The distinctive blooming plants have a crown like structure, with purples, yellows and whites. Their vines stretch out and wrap around any available host, covering all sunlit surfaces. As I walk past, he whistles Yellow Submarine by The Beatles.*



### 3. CARE

In the Oude Hortus, the ongoing practices of care tie back together, the separation of culture from nature and in doing so they reveal how care is a critical tool to challenge the dominant, rational humanist narratives towards the natural world that we find in history, institutions and science. Working at the intersection between science and technology studies and feminist theory, scholar María Puig de la Bellacasa states “Reclaiming care is to keep it grounded in practical engagements with situated material conditions that often expose tensions.”<sup>62</sup> In the case of the Oude Hortus, practical engagements are another term for assemblages. The temporary collisions of species engaged in care, result in a richly ambiguous space of intra-action. Barad stresses this collision as a “Knowing [that] comes from a direct material engagement with the world”<sup>63</sup> Care as a situated particular in the Oude Hortus is first observed and defined as: humans caring for plants through activities so the garden as a whole, maintains a clean and cultivated appearance. The grass is cut, the footpaths are raked and swept clean of debris, grape vines are prune, plants are dug and placed elsewhere, soil is turned, compost is made, and new bulbs are planted. Such activities establish the agency the volunteers enact on the garden as caretakers of the space. However, when we consider these practices of care as intra-active, human subjects are not the only entities that have the power to intervene and transform reality. Practical engagements are made by physical touch. Therefore, touch creates an interdependency and what we do through that engagement returns to re-affect us.<sup>64</sup> The interviews with the volunteers provide supporting evidence to confront care’s tensions situated in reciprocal relations, through touch and intra-action. Therefore, this analysis ultimately grapples with the sub-question: How do we care as naturecultures in the Oude Hortus?

What do practices of care look like in this particular heterotopia and how can these practices become catalysts to change the dominant ecological comprehension of naturecultures?

As a heterotopia, the Oude Hortus is thought to represent diversity, a worldly collection of plant species. Operating on the basis of a rational and humanist philosophy, the Hortus' long standing practices in the sciences are based on the illusion of unbiased observation and reason, which is a knowing based on a dis-embodied relation to, or an interaction with a distinct world and in this case, nature in the form of the garden.<sup>65</sup> Care as a quality of natureculture intra actions is subject to temporal assemblages of ongoing social and biological processes.

### **Dimensions of Care**



In human centered practices, Puig de la Bellacasa introduces three dimensions of care: labor/work, affect and ethics/politics.<sup>66</sup> These three dimensions of care are made visible in the garden by way of tensions and contradictions through the relations between human

and non-human entities. There are no clear-cut delineations between these three dimensions of care, rather they are made by and make one another through ongoing intra-actions.

In the garden, human care and labor practices are ongoing and situated in temporary gatherings, or assemblages. At present, care in the garden defines plants as objects. One reoccurring care practice was the act of making the garden neat and well groomed. *Kun je dat netjes maken?* (Can you make that neat and tidy?) This statement was used and said along-side almost every allocated task given to the volunteers. Such a statement is a reflection of the dominant CPC constructions continuously present in the Oude Hortus. At first, taking care of the space may mean to make it pleasant to be in, to hideaway the imperfections, the overgrowths, the balances and imbalances - a way of visually achieving equilibrium in the garden. Yet this aesthetic balance forgets to account for the living beings in need of care. Therefore, care is still tied to hegemonic relations but in its complexity, it reveals the tensions and contradictions situated in the Oude Hortus.

On Tuesdays, the head gardener and volunteers assemble to maintain the garden. Such practices require ongoing commitment. Labor is a direct engagement with the uncontrollable conditions of nature at hand. For many of the volunteers, their labor is guided by an affective dimension and is clearly noted in the following section by the narratives of the volunteers. The physical engagement with the garden instigates a reciprocal relating between the volunteers and the garden. In its present day relatings, the garden continues to make and be made by reciprocal assemblages of connection. Through care, the binaries and who cares for whom become more ambiguous.

The remaining dimension of care; politics and ethics, subtly permeate the ethos of the garden. Politics and ethics are most visible as institutional dynamics between the museum and the garden. This



dimension of care directly addresses what is good care. According to Puig de la Bellacasa, “an ethics of care cannot be about a realm of normative moral obligations but rather about thick, impure, involvement in a world where the question of how to care need to be posed. That is, it makes of ethics a hands-on, ongoing process of re-creation of ‘as well as possible’ relations and therefore one that requires a speculative opening about what a possible involves.”<sup>67</sup> Therefore, the ethical and political dimension of care raises questions around agency.



### **Human Agency**

To live as naturecultures requires the human attention and awareness. In the west, we have culturally separated ourselves from nature. Thus, when we initiate practices of care in the Oude Hortus, such as those carried out by the volunteers, they are situated in the la-

bor and maintenance in the garden. The exchange within the volunteer community is sincere, kind, and at times, humorously sarcastic. The work schedule for the volunteers is open ended, many come and go as they please, but the garden is typically the most populated between 13:00 and 15:00. At 15:00, the volunteers gather inside the canteen for coffee and tea. This momentary pause in the day strengthens the social relations between the volunteers and blurs the line between labor as an obligation and work as leisure. During my fieldwork, I sought out to understand why the volunteers committed to the practices of caring for the Oude Hortus because I wanted to understand how the quality of care played a vital role in assembling the natureculture garden. With each interviewee, I discussed the significance of care in the garden. From these discussions, it was clear that the question of why and how to care, did not provide a clear, consistent response. Rather, the volunteers were insistent of their need to care but could not easily answer why.

Connie began as a volunteer in 2002, for her it was important to care for this green piece of the city because it was both culturally and historically significant. Moreover, for Connie to engage in the labor dimension of care means that she represents a communal task where the geographic site acts as a place for her to learn those methods of caring for the garden.<sup>68</sup> Through her labor, Connie touches the affective dimensions of care. Having worked her whole life inside, Connie now finds it more favorable to be outside for it is good for both mental and physical health. She seizes the opportunity to learn the names of the plants and trees while simultaneously giving back to the earth.

In the garden, care occurs through practical and physical engagements of touch between the volunteers and the plants. Emphasized by Puig de la Bellacasa, "Touch is a neglected mode of relating with compelling potential to restore a gap that keeps knowledge from



embracing a fully embodied subjectivity” yet touch one of the most prolific acts carried out by the volunteers in the garden.<sup>69</sup> Mac favors labor that requires more physical strength in the garden. In this engagement he is able to let out the emotional heaviness and mental block whilst shaping and trimming the vines because of how he can redirect the energies of the plants. In this practice, Mac is aware that the trimming of plants carries with it an embodied knowledge of expertise that he is only beginning to uncover. It is a knowledge that requires working with the plant—rimming away at its woody branches in the winter and in the summer giving attention to the new green offshoots. For Mac:

*This can raise questions like if it's all too human dominant then it becomes a mental structure you look at and in other ways cultivating grapes requires you adjust but in a way that doesn't feel like you are mentalizing it all. For me in this super directive: grapes are like kind of an art like a symbiosis between men and the plants. And at times it just looks silly like: What the fuck did you do that to the plant?<sup>70</sup>*

From these narrative accounts, the relations between the volunteer community and the garden is one of reciprocity, labor, and performative affect. Care in its various ways of relating to the elements in the garden, can act as catalysts to step away from the dominant ideologies of separating nature from culture, object from subject. The very physical engagement of caring for plants has “the potential to respond to the abstract and disengaged distances we’ve made through knowing-by-observation” as rendered dominant in the history of botanic science.<sup>71</sup>



Care is both a verb and an adjective to describe one's subjective position. Care is relational and I might even go so far as to call it symbiotic because it contains characteristics of biological processes. The notion of care as framed from the perspective of the human grants the human the agency of the caretaker. However, the accounts of the volunteers caring for the plants, allude to the reciprocal relations that are formed by the very act of caring in naturecultures. Human beings are not the only ones with the power to transform the space or interview the reality present in the garden, rather they are participants in an intra-active and relational encounter. What then, constitutes the symbiotic relations of care in the Oude Hortus?

## **Reciprocal Relations of Care: Tensions and Contradictions**

Henry, the head gardener recounted that the most difficult things to take care of in the garden are not the plants themselves but the infrastructures that support their growth. The greenhouses require many regulating functions including heat, ventilation and in the hot summer months, protection from the sun. The purpose of the greenhouses is to keep vegetation requiring very different climate than in the Netherlands, alive. However, upon deeper examination, there is no longer a botanic logic to what is and is not inside the greenhouses. According to the University Museum's director Paul Voogt, various factors in relation to the maintenance and care of the plants influenced the decision-making processes of the Utrecht University Museum to both include and omit certain species in the garden.<sup>72</sup> Today, the greenhouses contain place holder plants. They are selected not according to botanic knowledge but because the plants are easy to care for. When the greenhouses were restored in 2007, the plants were selected in consultation with Copijn landscape architects, on the basis that they had a low threshold of maintenance. Copijns vision for the greenhouses, renders the plant collection as an insufficient representation of a distinct botanical collection.<sup>73</sup> These common placeholder species of cacti, succulents, aloe, and ivy were easy to care for and thus now plague the interior structures of the greenhouses. Such decisions raise questions surrounding the dimensions of care and value between the institution and the future possibility of the garden as one of naturecultures.

Most of the volunteers have little interest working inside the greenhouse when they come to work. Norman is one of the few that frequents the interior space. Most Tuesdays, Norman is found inside the greenhouses pruning back and redirecting the growth of the ivy. With a passion for the cultivation of Bonsai trees, he knows that in the

art of bonsai care, you must work with the season conditions or else the livelihood of the plant is compromised. For him it is a sport, if you do nothing with the bonsai, it will grow into a large tree, the art is to make a large tree in a small body. For Norman, care-work is a participatory act that requires the learning and negotiating a deeper wisdom of growth and ongoing biological processes. The art of Bonsai and the work in the garden, as a volunteer Norman has learned that for as much as you can redirect the energy of a tree, you are still working in ambiguity and uncertainty, there is always some level of his connection with nature that is unforeseen and uncontrollable, and that for Norman is precisely the sport of cultivating and caring for the plants in the green houses.

When asked about his position on care in relation to the garden Norman expresses, he is first here for the sociability, and second for the nostalgia the garden brings. This fragment demonstrates the entangled affective dimension of care present in the Oude Hortus and vital for a nature culture garden to thrive.

*And then I sit here, with the feeling you have with the plants. When I come here in the summer, for example, when the temperature is 30 to 40 degrees, I love it. It reminds me of when I was a little boy spending time with my grandfather and that feeling played a role when I began volunteering. It is also nice to keep those older things alive; cherish them a little, and that plays a role in what we value. But it is a unique place here, in the city. Just go twenty meters in that direction, then you're in the middle of traffic yet when you sit here, you don't hear anything.<sup>74</sup>*

From this partial and incomplete fragment, Norman traverses through the effect of connections between himself and the garden. To perform

this analysis, I compared Normans actions prior to the interview to what he spoke of in our conversation. He stood in the warmth of the green house clipping away at the vines gently humming to himself. Analyzed diffractively, these particulars express relations with and between different bodies. Norman reacts to a specific the temperature of the garden that triggers a memory. In his narrative he travels back to childhood. Together, with his grandfather, Norman discovered the world through play and curiosity. In the Oude Hortus, Norman recreates the affective dimensions from his memory by laboring in the garden. In this act, he reflects on the value of things, how their age and history play into their significance. In doing so, he also collapses the separation between sites, places, people and time yet returns to the physical place of the Oude Hortus.

For Ben, the most important reasons for him coming and volunteering in the garden were that the garden gave him fresh air in the city and secondly, the garden provided the opportunity to work outside.<sup>75</sup> The Oude Hortus is both Ben's gym and his meditation center. Ben and Norman, opt for some of the heavier work such as planting trees, turning the compost heap and planting the persimmon and mulberry tree among other heavier manual tasks. Ben finds it is also nice to just be physical. Besides the outside of the work he does in the garden and walks through the city, he doesn't partake in other forms of exercise. For him, the garden provides both mental and physical strength. By engaging in the labor of care both the people and the plants undergo change.

Ben is one of the volunteers who reflects on his labor in the garden as a reciprocal process that requires collaboration between species. Ben in conversation, also articulates how of plant-human interactions are formed through the practices of care in the garden.

*"It is so important to everyone actually because you realize that you are also just a piece of nature biologically, you are also part of nature. You live, so and that you can do very quietly, but if I work here for an afternoon, I can have enormous problems on my mind, all possibilities completely gone. And then I enter my skin and I am too tired to think about my problems, so I get down to work for the fine method of fine therapy."<sup>76</sup>*

Care like temporality, is not performed in a unidirectional manner, rather it is reciprocal and reoccurring, an intra-active practice. To analyze care diffractively, I examined my painting *Ongoing* alongside the fieldnotes surrounding my conversation with Ben. Undergrowth is a compressed image with no clear distinction between layers the subjects (plants) are entangled and active. As I was making this work, I too realized that I was a piece of nature trying to evoke the dynamic processes of change within the garden, fixated on the between. In the same way ben interacted with the garden through touch, I did by describing forms and painting. From my analysis, I concluded that the effect of connections is an ongoing process. We see here how mental problems for Ben ease their way into the earth and uncloud his thinking in a way that is generative to both himself and the garden.

Care active as a verb and adjective, situates ongoing processes, commitment, ethics and speculative imaginations into concrete practices. In investigating what happens the volunteers in caring for the garden we see that they are cared for in return by way of their mental and physical states. The reciprocity of this is made visible by physical engagements with the earth, the plants, the trees and the critters in the garden. By touching and working in the garden the volunteers blur the lines between observing at a distance and making conclusion about our place in the world of naturecultures and participating intra-actively in world making engagements.



These acts of care are situated in the particular ecosystem of the Oude Hortus and must be analyzed as such. In their situatedness they allude to the possibilities of framing care not at the hands of humans granting them as *not* the only ones who have agency in how the garden, looks, acts and functions in the city of Utrecht. By understanding care as a reciprocal process, we can future imagine an alternative frame for the way the Oude Hortus functions in respect to its social and cultural significance. The garden already has everything it needs to become a garden of naturecultures, it simply requires the institution of the university museum to adopt the lens for learning to live with more than human worlds. In what better place to do this than a heterotopia of ongoing, reconfiguring, natureculture relatings?



#### 4. PROPOSITIONS FOR A NATURECULTURE GARDEN

In this thesis, I have made three critical moves away from nature and culture as separate entities towards an entangled and richly complex reality of living as naturecultures in the Oude Hortus. In this final chapter, I will speculate on what can become of the *cracks* within the dominant narratives that separate culture from nature. Moving through these cracks, I recognized the ontological split between nature and culture as a Capitalist-Patriarchal-Colonial (CPC) formation. I questioned how temporality could be looked at as non-linear and how care is a catalyst to see nature as a community, one that we all belong to. Finally, I propose that the Oude Hortus be seen as a tool to think through our natureculture relatings with and an invitation for further research, situated in particulars, in this field. Perhaps this garden in its ambiguous relationship to history, earth and culture can become not a symbol to preserve European hegemony in science, but rather a proactive tool to reposition the dominant cultural way of relating to nature.

To summarize the main points of my argument, this thesis investigated how the qualities of temporality and care challenge the CPC formations which separated culture from nature. The Oude Hortus analyzed diffractively, affirms that a western, linear conception of time offers a limited frame of reference to the possibilities of the multiple timescales and living processes present in the garden. The quality of temporality is dynamic and multidirectional rendering it inseparable from the condition of care carried out by the volunteers of the Oude Hortus. Cumulative, transitory and non-linear time is entangled with the qualities of care in the Oude Hortus and relates to the urgency of living as naturecultures. Collaborations and continuous relating's between species through touch and acts of care are situated in the particular ecosystem of the Oude Hortus. While care may begin in the agency

of the human, the narrative fragments collected from the volunteers reveal that care is a reciprocal and relational process. Therefore, we can further imagine another way of thinking within the Oude Hortus as a place of ongoing naturecultures.



Based on my analysis, I conclude that the activity of the Oude Hortus is not separate from the academic debate of naturecultures. Rather, it is entangled with the present socio-ecological conditions which demand an alternative way of relating to nature, a way that is aware of the gardens colonial past as it simultaneously looks forward to working interactively alongside living beings. Puig de la Bellacasa rooted her research in permaculture ethics to “establish the possibility of transforming people’s ways of going about our everyday relations to the earth its inhabitants and resources.”<sup>77</sup> The Oude Hortus, already has everything it needs to become a garden of naturecultures.

As I conclude this thesis, the Oude Hortus and the University Museum have closed their doors to visitors to embark on a two-year period of expansion. Therefore, this artistic research situates itself as a relevant societal urgency for both the University Museum, and the broader cultural community within the city of Utrecht. The closure occurs with the intent to renovate and expand the museums physical footprint. However, the plan for what the garden can become is ripe with possibilities. The garden has the potential to behave intra-actively alongside the excess that is natureculture. What is simply required now is that The University Museum to adopt the lens of learning to live with more-than-human worlds as part of their educational programming and to use the garden as a tool to rethink natureculture relations with our living world.

Why do we need to imagine this garden as one of naturecultures? What has been made visible in the garden through this thesis is the relations between the elements of the garden such as the care takers and volunteers, the critters, animals, plants and trees, seasonal conditions, architecture and the institutions. These elements, through multiple temporalities configure and reconfigure the meaning of the garden away from plants as curated objects and move towards a space of intra-action where people and plants are both active participants in life's processes. The volunteers represent a group of people that need the garden, just as the garden, needs them. Their actions insights and stories of the garden contribute to the cultural significance of the site. Finally, I end here with an invitation for further research through a list of propositional open questions dedicated to thinking the garden, otherwise.



*The Possible Garden- A Fieldnote*

*In spite of the garden's problematic history;*

*How can we use assemblages of care to hold the past accountable?*

*Look to the future for new possibilities of learning to live with?*

*How do we engage with the plant world without being reductive, without  
diminishing the status of plants to mere objects?*

*How might we remake the garden to hold ourselves accountable of the past  
yet propose a new, possible future.*

*How can the garden move beyond historical representation of past scientific  
processes and include practices, ideas and processes that works alongside  
the more-than-human ecosystem of the Utrecht Oude Hortus?*

*How?*

*Now?*

*If not now, then when?*

## Endnotes

- 1 Tobias Rees, *After Ethnos*. (Durham and London: Duke University Press, 2018), 55.
- 2 Jessica Smartt Gullion, *Diffractional Ethnography: Social Sciences and the Ontological Turn*. (Milton: Taylor & Francis Group, 2018), 105.
- 3 Rees, *After Ethnos*, 85.
- 4 Michel Serres and Bruno Latour, *Conversations on Science, Culture, and Time*, trans. Roxanne Lapidus (Ann Arbor: University of Michigan Press, 1995), 54.
- 5 Rees, *After Ethnos*, 85.
- 6 Sivils, Matthew W. "The Green Thread: Dialogues with the Vegetal World. Ed. Patrícia Vieira, Monica Gagliano, and John Ryan. *Interdisciplinary Studies in Literature and Environment* 23, no. 3 (2016), 642-643, 88.
- 7 This text by Michel Foucault "Des Espace Autres," was published by the French journal *Architecture /Mouvement/ Continuité* in October 1984. It was based on a lecture given by Michel Foucault in March of 1967. Although not reviewed for publication by the author and thus not part of the official corpus of his work, the manuscript was released into the public domain for an exhibition in Berlin shortly before Michel Foucault's death. Translated from the French by Jay Miskowic.
- 8 Foucault, "Des Espace Autres," 7.
- 9 This report was commissioned by Utrecht University and carried out by Patricia Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, (Renswoude: Debie & Verkuil tuin park landschap. March 15, 2019), 12-13.
- 10 Iris van der Tuin, "Naturecultures." Ed. Rosi Braidotti, and Havalova. *Posthuman Glossary* (London: Bloomsbury Academic, 2018), 269-70.
- 11 Bruno Latour, *We Have Never Been Modern*, (Cambridge: Harvard University Press, 1993), 27.
- 12 Latour, *We Have Never Been Modern*, 108-9.
- 13 Haraway, *The Companion Species Manifesto*, 2.
- 14 van der Tuin, "Naturecultures," 269.
- 15 Latour. *We Have Never Been Modern*, 92-109.
- 16 The -Artistic Research fieldwork, on- and off-site drawing, and speculative fiction were inspired by Henk Slager, Vytautas Michelkevicius, and Mika Hannula. My choice of Anthropological research My methods are informed by the ethnography and fieldwork methodologies of Tobias Rees.
- 17 Vytautas Michelkevicius, *Mapping Artistic Research: Towards Diagram-*

*matic Knowing* (Vilnius: Vilnius Academy of Arts Press, 2018), 129.

18 Mika Hannula, Juha Suoranta and Tere Vadén. *Artistic Research Methodology: Narrative, Power, and the Public* (New York: Peter Lang, 2014), 21.

19 E. Richard Sorenson and Allison Jablonko, "Research-Filming of Naturally Occuring Phenomena: Basic Strategies," *Principles of Visual Anthropology*, ed. Paul Hockings (Berlin and new York: Mouton de Gruyter, 2003) 148.

20 Narrative interviews are situated within the field of narrative inquiry studies. It begins with three forces of biography, history, and social structures and how they affect and intersect each other. It is a way of shaping and ordering past experiences and situating them within particulars of time and place. Hannula, Suoranta and Vadén. *Artistic Research Methodology*, 39-40.

21 Hannula, Suoranta and Vadén. *Artistic Research Methodology*, 44.

22 Michelkevecius, *Mapping Artistic Research*, 138.

23 Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor: Open Humanities Press, 2012), 52.

24 Barad. *Meeting the Universe Halfway*, 30.

25 Hillevi Lenz Taguchi. "A Diffractive and Deleuzian Approach to Analysing Interview Data." *Feminist Theory* 13, no. 3 (December 2012), 269.

26 Barad. *Meeting the Universe Halfway*, 30.

27 Jessica Smartt Gullion, *Diffractive Ethnography: Social Sciences and the Ontological Turn*. (Milton: Taylor & Francis Group, 2018), 123.

28 Hillevi Lenz Taguchi. "A Diffractive and Deleuzian Approach to Analysing Interview Data." *Feminist Theory* 13, no. 3 (December 2012): 278.

29 Karen Barad. *Meeting the Universe Halfway: quantum physics and the entanglement of matter and meaning* (Durham and London: Duke University Press, 2007), preface IX.

30 I first heard of the term CPC from the terra critica reading group I periodically attend.

31 Maria Mies and Vandana Shiva, *Ecofeminism* (New York & London: Zed Books, 2014), 144-45.

32 Maria Mies refers to this as colonizations. Mies and Shiva, *Ecofeminism*, 143-44.

33 Specifically see text found in chart referencing Lukkien en Nieuwman (red.) 1989, 12. Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 14.

34 This information was gathered from small maps and plaques hung in the garden that explainted the order of the Regius Garden, see Appendix C.

35 Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 22.

36 Anna Tsing does a fantastic job in explaining the concept of gen-



eralization and offers a relevant example of generalization practices in botanical science. I believe this is critical to understanding the deep cultural narrative of western culture that was responsible for separating culture from nature. For a detailed account see Anna Lowenhaupt Tsing. *Friction: an ethnography of global connection*. (Princeton: Princeton University Press, 2005), 89-95.

37 Tsing, *Friction*, 89.

38 Tsing, *Friction*, 94.

39 Tsing, *Friction*, 94-5.

40 Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 97.

41 Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 97-99.

42 Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 97.

43 Barad, *Meeting the Universe Halfway*, 86.

44 Stefano Harney discuss the role of logistical capitalism within cultural institutions, in this text he discussing the way in which public institutions including universities, museums, hospitals etc become privatized and in doing so, they fall into the rhythm of a growth orientated logistical capitalism, where culture, must be accessible, quickly available, and audiences must be accessed through participation, outreach, and education. When evaluating the institutions, the goal is always growth. For a more in-depth explanation see Maria Hlavajova ed. with Simon Sheikh, *Former West: art and the contemporary after 1989*. (Utrecht: BAK ; Cambridge, MA : The MIT Press, 2016), 450-53.

45 The specific interview excerpt illustrates the complexity of communication. I did not feel that it was just to translate from English to Dutch because Henry kept switching between languages. In thinking between language, a new idea and form of knowing emerges and I intend to emphasize that by documenting this fragment in this manner.

46 Language is with reference to Anna Tsing use of the term friction for more see: *Friction* 2005.

47 Dipesh Chakrabarty, "Anthropocene Time," 6.

48 Dipesh Chakrabarty, "Anthropocene Time," 6.

49 Karen Barad, *Meeting the Universe Halfway*, 49.

50 Donna J. Haraway. *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016), 16.

51 For an explanation of intra-action see Karen Barad, *Meeting the Universe Halfway*

52 The Chthulucene is supported by an armature of complex, non-linear processes that compose a living planet. These processes account for both biological systems and structures of social organization. The Chthu-

lucene is an ongoing a period that cannot be made tangible or empirically measured. See: Donna J. Haraway. *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016), 51

53 The extensive ethnography by Peter Crane (2013). of the ginkgo biloba traces the history, science, and cultural significance of this peculiar species. Engelbert Kaempfer (1651-1716) was well traveled in Japan and provided the first European descriptions of the ginkgo in Japan. The name attributed to the ginkgo in China and Japan was "silver apricot." For more on the etymology of the ginkgo see Peter Crane. *Ginkgo* (New Haven: Yale University Press, 2013), 209-219.

54 In conversations with Henry the head gardener, the front desk volunteers, the museum staff, and the director of the institution, they all had a story to tell about the Ginkgo.

55 Crane, *Ginkgo*, 4-5.

56 Haraway, *Staying with the Trouble*, 51.

57 Haraway, *Staying with the Trouble*, 49.

58 Haraway, *Staying with the Trouble*, 49-50.

59 I define becoming-with as a series of processes that acknowledge the more than human entities share the planetary commons. To become-with something, is to imagine new realities that consider the human in a decentralized context involved in an ongoing process of systemically relating to both the living and non-living world, for a deeper explanation see: Haraway: *Staying with the Trouble*, 12-13.

60 Haraway, *Staying with the Trouble*, 13

61 Karen Barad quote: "To be entangled is not simply to be intertwined with another, as in the joining of separate entities, but to lack an independent, self-contained existence. Existence is not an individual affair. Individuals do not preexist their interactions; rather, individuals emerge through and as part of their entangled intra-relating. Which is not to say that emergence happens once and for all, as an event or as a process that takes place according to some external measure of space and of time, but rather that time and space, like matter and meaning, come into existence, are iteratively reconfigured through each intra-action, thereby making it impossible to differentiate in any absolute sense between creation and renewal, beginning and returning, continuity and discontinuity, here and there, past and future." Karen Barad. *Meeting the Universe Halfway: quantum physics and the entanglement of matter and meaning* (Durham and London: Duke University Press, 2007), preface IX.

62 María Puig de la Bella Casa, *Matters of Care: speculative ethics for more than human worlds*. (Minneapolis: University of Minnesota Press, 2017), 10-12.

63 Barad. *Meeting the Universe Halfway*, 49.

- 64 Puig de la Bella Casa, *Matters of Care*, 114.
- 65 Puig de la Bella Casa, *Matters of Care*, 111.
- 66 Puig de la Bella Casa, *Matters of Care*, 5.
- 67 Puig de la Bella Casa, *Matters of Care*, 6.
- 68 For an excerpt of the interview with Connie see Appendix A, p. 2.
- 69 Puig de la Bella Casa, *Matters of Care*, 98.
- 70 For an excerpt of the interview with Mac see Appendix A, p. 3
- 71 Puig de la Bella Casa, *Matters of Care*, 126.
- 72 In my meeting with Paul Voogt we spoke about the garden, the role of the museum, how it will change with the renovations. This was also where he mentioned to me that they had a historical analysis done on the garden and he revealed some new complexities the garden faced. Paul Voogt, in conversation with Amy Pecal, Feb 20, 2020.
- 73 The plant species in the garden were found to be commonplace and too general. In previous periods of the garden's history, the choice was explicitly made to display special species, a multitude of them, or a special taxonomy collection. Today this is no longer the case. Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, 97.
- 74 For an excerpt of the interview with Norman see Appendix A, p. 4.
- 75 For an excerpt of the interview with Ben see Appendix A, p. 4.
- 76 For an excerpt of the interview with Nani see Appendix A, p. 5.
- 77 Puig de la Bella Casa, *Matters of Care*, 127.
- 78 Donna J. Haraway first used the term naturecultures to describe her relations with her dog. The term is both an object and a concept for analysis. *The Companion Species Manifesto: Dogs people and significant otherness* (Chicago: Prickly Paradigm Press, 2003), 2.
- 79 Dipesh Chakrabarty, "Anthropocene Time," *History and Theory* 57, no 1 (March 2018): 9.
- 80 Perhaps it is critical here to note that the ongoing climate change debate is inherently problematic because it is a story of reductionism and of rational humanist philosophies looking for one thing to blame within climate change, isolate it and then remove the problem. But what it fails to see is that the problem is made up of many smaller problems which cannot be isolated from the conditions of which they make themselves visible. This thesis is situated in the climate justice debate, but rather than conforming to the need to lower CO<sub>2</sub> emissions or change consumer spending, this thesis challenges the established narrative and proposes an alternative perspective to caring for more-than-human worlds.

## Appendix A.

### List of interviews

Henry – 45-60, male, head gardener since 2002  
Norman – 60-75, male volunteer since 2003  
Connie– 75- 85, female, volunteer since 2002  
Ben – 75- 85, male, volunteer since 2003  
Honey – 60-75, female, volunteer since 1994  
Meg – 65-75, female, volunteer since 2001  
Mac – 25-30, male, volunteer since 2016  
Nani– 60-75, female, volunteer since 2008  
Marc – 23-28, male reception, since 2019

The persons were interviewed for a period of 8 to 20 minutes and all asked the same four questions as prompts to engage in a similar semi structured and open conversation. These four questions, while broad, gave particular examples and answers to my inquires around the conditions of time and care situated in the particular human/plant narratives in the garden.

- (1) How did you come to the garden and why?
- (2) What is your strongest memory from the garden,
- (3) what does it mean for you to care for the garden?
- (4) Do you have any notable places or plant in the garden, if so, what is your relation to them?

Other persons interviewed through non-recorded (informal) interviews include:

Paul Voogt, directors of the Utrecht University Museum,  
Frank van Norel. director of operations at Utrecht University Museum.  
Fieldnotes were taken during these meetings.

### Interview Code

Orange: direct sensations of care

Blue: Time and relatings to time

Pink: Social and Cultural significance

Green: Value

## Volunteer Interviews

### Honey (interview excerpt)

Amy: Maar we hebben echt een hele geschiedenis. Waarom vind je het leuk en belangrijk in de tuin te werken?

Honey: Ik heb in het verleden op alle plekken in de tuin gewerkt. Een hoek achter de vijgen noemden we toen een Japans stuk van de tuin stonden veel planten die iets met Japan hadden. Dat is geloof nu niet meer daar zo daar. Even kijken. Het is wel niet heel ver daarvandaan maar ietsje richting de vijgen. Eigenlijk heb ik overal wat er maar te doen was gewerkt en dat was ook **een periode een project waar veel mensen aan mee hebben gewerkt**. De hele herinrichting van de cottage-tuin. Daar gingen we, één of meer in de week gingen we zeven bladden, **dat werd een nieuw werkwoord dat nog niet bestond en dan gingen we zevenblad uit de tuin halen. De hele tuin werd ontdaan van zevenblad want het is een hardnekkig onkruid**. Vooral in de tuin is het onkruid. Het wordt wel gegeten ook maar daar moet je het niet hebben.

Honey: Ik werkte soms ook in de Regiustuin, de medicinale kruidentuin en gaandeweg ging ik daar ook wel vaker werken. Op een gegeven ogenblik is ook Rietje Damen vrijwilliger geworden in de Hortus dus ik kende Rietje al wel. **Zij ging zich helemaal toeleggen op die Regiustuin. Ze heeft een hele mooie database aangelegd met heel veel informatie over alle planten**. En ik ging op een gegeven ogenblik ook mee als maatje van Rietje en Helma was daar ook inmiddels mee gaan merken dus we hebben toen dat een beetje samen verder opgepakt. **En Rietje die werd helaas ziek is overleden. Ik probeer nu nog een beetje te red- den wat er over is van die database van Rietje maar dat is dus niet het werken in de tuin zelf**.

Amy: Dan dat is nu jouw project.

Honey: **Dat is een project wat ik wel belangrijk vind en wat ik nu al de nodige jaren onder de aandacht van het museum probeer te houden**.

## Appendix A.

Ik vind het belangrijk om een sterke connectie met geschiedenis maar ook als mensen hier samenkomen en ik kijk naar de mooie bomen en planten. Ja leuk maar je moet weten wat nu en zeker wat betreft de Regiustuin. Dat is eigenlijk een heel heel mooi bestand met gegevens over alles wat daar staat.

### Connie (interview excerpt)

Amy: Wat betekend voor jou om de tuin te onderhouden?

Connie: Omdat het een hele mooie groene plek is in de stad. Het is een open ruimte en **het heeft een lange geschiedenis**, dat vind ik ook belangrijk. **En ik vind het ook prettig om met een groep mensen samen iets tot stand te brengen**. Zo'n tuin is daar heel geschikt voor. En het is ook niet te groot. Je komt dus niet zoals in een groot park of een landgoed dat je heel ver uit elkaar bezig bent. Het is overzicht de omgeving.

Connie: **Volgens mij. Als ik hier ik voelde de hele plek je begrijpt het wel en zie en interacties maken met al die dingen**. Ik vond het niet te groot maar ook niet te klein. Nu zitten ze hier tussenin. Dus dat is mijn motivatie. Ik was niet echt van het tuinieren ofzo. Ik wist er ook niet zo heel veel van, maar ik heb wel veel geleerd.

Connie: Maar ik vind het wel prettig om buiten bezig te zijn, ik heb mijn hele leven eigenlijk wel binnen gewerkt, vaak in kunstlicht. **Ik vond het heerlijk om buiten bezig te zijn**.

Amy: Buiten bezig te zijn. Heb je een favoriet dingetje in de tuin te doen bijvoorbeeld of werken en een fokken voor?

Connie: Nee niet echt eigenlijk. Nee ik wil eigenlijk altijd wel alles doen. **Ik moet alleen niet zo graag in de kas**. Dat vind ik vaak een beetje benauwd en **ik wil graag veel liever buiten werken**.

### Mac (interview excerpt)

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Amy: Yeah that's a very interesting sensation to have. It's like a caretaker of plants or living things, you know, but also this person that controls the outcomes in a way like knowingly that in a space like this you can control where things move. Where things direct their energy and growth.

Mac: And this can raise questions like if it's all too dominant human dominant then it becomes like, a mental structure you look at and in other ways it's also. Cultivating farms like grapes it's like you do should you adjust but that doesn't feel like you are mentalizing it all. For me in this super directive, for me Grapes are like kind of an art like a symbiosis between men and the plants. And all the times just look silly like Where the fuck did you do that to the plant. Ah but the question was...

Mac: I think you should have respect for the plant and on the other-hand, I also don't mind. Now let's just say it really interesting. Uh "spannings feld" like this interesting oscillation or in between like a playing field. It's the same between, like pigs, if you eat pigs. They suffer differently than you would eat insects. I mean they're both animals, but I do feel like pigs have another way of relating to each other. If you disrupt that that's for me that's differently than having a cricket farm and making cricket burgers out of it. And for plants. Yeah. I mean you can check when they're stressed and if you hurt them they get stress but I don't think if some of my friends read the research, and they get like "oh I get confused because I love to read it and now I feel should I feel guilty for the plants?" No, I don't believe that you should be respectful towards the. For me. But I also can be non-sentimental about it like for me it's like life expressing itself through this form, and if I hurt the form, I don't hurt life. That's true. Yeah for a big it's different because it has its own. I think it has a different kind of a soul and emotion.

Amy: Right. This is a mammal and now it's a matter of a different position in the Earth's common space.

Max: Yeah. And what I think that's the purpose of that, and if I am



## Appendix A.

disrupting the purpose or not and plants. That's funny because I'm quite mental in the way I am, smart or I discovered a world through my ideas. I want to learn more and more and more about plants and then it becomes a theory. And then there's, the idea is to get there for me to go deeper into the living world of the plants. It's a really nice contrast. Like, what I'm doing on my rooftop. It's not the world's not doing it itself. I have to buy the parts because it's the full sunshine to have put a lot of effort otherwise you have nothing to. We have all the effort and the thinking to make it possible that they go to our own way. If you overthink it's you're not being open towards the expression of life but you need to understand that if you never overthink it then you have just your parts with maybe flowers maybe not.

Amy: It is a matter of finding that balance. This balance in between these ongoing life forces any amount of control that you can take out in this amount of impact that you have. Yeah.

Max: And then what. The how much control do I take? Is dependent upon how how sensitive I am towards what I see and what I know what should be good. So it's like interesting to do to get to read more to know more. Is like mental, and then you have to be open towards what's happening.

### Norman (interview excerpt)

Amy: Ik denk dat we dit jaar nog een variant die op tien mensen gaan doen. Wat betekent het voor jou om de tuin te onderhouden?

Norman: Ik zit hier in de eerste plaats voor de gezelligheid. En dan zit ik hier voor het, hoe zal ik het zeggen, voor het gevoel wat je hebt met de planten. De genen-achtige toestanden. Als ik hier bijvoorbeeld 's zomers komt als het zo 30 40 graden is dat vind ik heerlijk. Dat doet me denken aan dat ik een jongetje was met mijn opa was. En dat gevoel speelde toen ik begon. En het is natuurlijk ook wel mooi om die oudere dingen in stand te houden. Dat speelt natuurlijk ook wel een rol. Maar het is ook wel een uniek plekje hier in de stad. Ga maar twintig meter daar, dan zit je midden in het verkeer. En zit je hier, je hoort niks. De oude

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dingen moeten we een beetje koesteren. En dat doen we niet veel. We breken liever af.

Amy: Ik weet niet goed hoe je het zegt in het Nederlands, maar het wordt altijd ingewisseld voor technologie, informatie.

Norman: Mensen gooien een hoop weg, ze slopen het en ze denken er niet over na wat voor een waarde het allemaal heeft. Bijvoorbeeld de oude binnenstad hier. Die is heel uniek, heel mooi. Mijn vader komt uit Harderwijk en dat was in de vijftige jaren een schittert vissersdorpje. Echt mooi. In de zestiger jaren kwam daar een gemeentebestuur met een burgemeester en die heeft de halve binnenstad heeft hij laten slopen. En wat kwam ervoor terug; een blokker en een V&D. Ze vernielen een hoop. Voordat ze het gingen opknappen hier wilden ze hier huizen bouwen en een parkeergarage. Gelukkig hebben ze dat kunnen tegenhouden, maar dat had niet veel gescheeld of het bestond niet meer, dat is toch raar.

### Ben (interview excerpt)

Amy: Wat betekent voor jou om de tuin te onderhouden?

Ben: In de eerste plaats frisse lucht, in de stad. In de tweede plaats buiten werken. Want in het begin was die kast helemaal niks, dan moesten we met een helm op in de kas werken. Maar toen de kas gerepareerd was en moest worden in gerecht heb ik heel veel met Norman in de kas gewerkt. Maar toen heb ik Norman laten weten dat het mijn voorkeur heeft om in de tuin te werken. Want ik zit al genoeg binnen. In de frisse lucht, buiten. Ik ben ook helemaal niet zo'n plantenliefhebber, bomen wel, maar plantjes dat niet. Ik kan die namen nooit de namen onthouden, en het is me allemaal te klein en ik ben wat meer van het zware werk. Vandaar dat Henk me nu ook aan de compost, ik ben ook begonnen bij de composthoop. Keren en nog een keer keren en dan zeven en uitrijden om het over de perken te verdelen. Het is ook lekker om gewoon even lichamelijk bezig te zijn, want ik doe altijd hoofdwerk. Nu wandel ik elke dag wel, maar ik sport niet. Maar de Hortus is mijn sportschool en mijn meditatie-centrum. Daar doe ik dan ook andere

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mensen nog een plezier mee, dus voor mij is dit genoeg.

Ik heb eigenlijk altijd in de hele tuin gewerkt, dat hangt een beetje van het seizoen af. Wat leuk is, als je zo lang in een tuin werkt, is dat je denkt "oh dat heb ik nog gedaan, met Norman heb ik nog die metalen banden langs het grasveld erin gestampt. Dat was heel zwaar werk. Bomen geplant die dus, dat is ook leuk, dat is ook leuk om te zien dat het groeit allemaal. Zoals die kaki-boom bijvoorbeeld, daar heb ik nog aan mee geholpen om te planten. De moerbijboom, bij de composthoop, hebben Norman en ik nog tegen de muur vastgezet. Toen Henk er mee aankwam had hij een heel klein wortelkluutje, maar dat wilden we toch proberen.

Ben: Denkt ook dat heb ik nog gedaan. Met Norman heb ik die metalen banden langs het grasveld de enige stam. Dat was heel zwaar. Bomen geplant dus. Dat is ook leuk om te zien dat het groeit allemaal en het groeit heel goed hier altijd zelfs die kaki Boom bijvoorbeeld. Die hebben meegeholpen om te planten. De Moerbeiboom bij de composthoop hebben Norman en ik.

### Nani (interview excerpt)

Amy: Wat betekend voor jou de tuin onderhouden en verzorgen.

Nani: De natuur neem ik. Het klinkt misschien gek maar ik kom niet voor mijn sociale contacten hier. Ik werk hier, ik heb vanaf dat ik zo klein was heb ik samen met mijn opa in de tuin in de natuur altijd spijbelen van school lopen op een goed moment om de polder in te kunnen gaan op mijn fiets. Daar is te paard wat loslaat. Liep dat pakte ik een stukje op rij. Maar ik heb altijd iets met natuur gehad met bijzondere planten. Ik kan bijna geen wandeling maken zonder om de twee meter stil te staan en te denken van hei! wat is dat. Het is gewoon aangeboren. Dus, ik kwam hier niet voor mijn contacten en ik weet wel dat de mensen hier dat moeilijk vonden want zij allemaal in contact met elkaar en gezellig dit en dat, dat zat niet in mijn systeem. Ik ben dol op mensen maar af en toe hoef ik ze helemaal niet wil het helemaal rust.

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Amy: Als ik kom hier praten met wat precies maar het is iets met aarde, something internal and indescribable, Ik voel dat oké maar ik kan niet worden vinden om te uitleggen het gevoel dat ik heb als ik werk heir. Ik werk met eten en dat is precies wat ik zoek- waarom we met de natuur werken en waarom is het belangrijk. Het is heel belangrijk en ik zie in het minst en minste mensen heeft een ervaring met natuur, en dus ik been een beetje bang voor de toekomst. Ik hoop dat meer mensen kunnen be closer to nature. Ik heb je misschien een favoriet plekje in de tuin om te bezoek?

Nancy: Ik kom één keer in de week en als er iets bijzonders te doen is, ben ik altijd van de partij. Dan denk ik in het weekend of wat dan ook tussendoor. Als ik bezoek krijgt van wie dan ook, dan ga ik met ze in de tuin even lunchen, even wat drinken en ik ga eens in de tuin laten zien alsof het mijn eigen tuin is. Dat is niet zo voelt het wel omdat het is. Ik leep iedereen meende toen mijn neef uit Australië met mijn nicht uit Ierland naar de tuin.

Appendix B.



*Undergrowth*, 2020. Oil on linen, 70 x 80 x 4 cm © Amy Pekal



*Ongoing* 2020. Oil on linen, 73 x 90 x 3 cm © Amy Pekal



Appendix B.



*Overgrowth* 2020. Oil on linen, 75 x 80 x 2 cm © Amy Pekal



*Mousetrap* 2019. Oil on wood,  
25.4 x 20.3 x 2 cm cm © Amy Pekal



*Ginkgo* 2019. Oil on wood,  
25.4 x 24.5 x 2 cm cm © Amy Pekal

# Appendix C.

TOPONIEMKAART



Map 1

Depicts the various historical buildings in connection to the Oude Hortus. © Patricia Debie, Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht, (Renswoude: Debie & Verkuijl tuin park landschap. March 15, 2019), 12.

## 1. INLEIDING



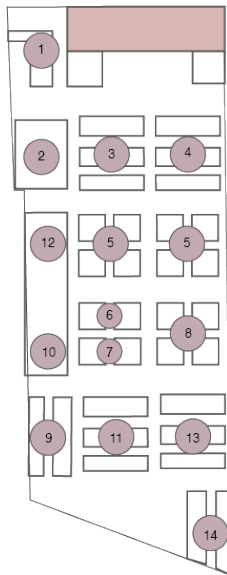
Map 2

Depicts the various historical trees and plant in connection to the Oude Hortus. © Patricia Debie, Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht, (Renswoude: Debie & Verkuijl tuin park landschap. March 15, 2019), 13.



## Appendix C.

Map 3 Depicts the Regius Garden as divided into 14 ailment specific sections.



- 1- Calming herbs
- 2- Wound healing and astringent herbs
- 3- Herbs for fever and inflammation
- 4- Herbs for tooth pain and oral hygiene
- 5- Herbs for the respiratory system
- 6- Herbs for heart and vascular disease
- 7- Liver herbs
- 8- Gastrointestinal herbs
- 9- Laxative herbs
- 10- Stopping Herbs
- 11- Herbs for bladder and kidneys
- 12- Herbs for muscles and joints
- 13- Herbs for skin
- 14- Women's Herbs



1991 - Ontwerp door Bureau Copijns

Map 4 Depicts Copijns design for the Oude Hortus in 1991, intended to represent the historic phases of the garden's history. © Patricia Debie, *Historisch-ruimtelijke analyse + Visie Oude Hortus te Utrecht*, (Renswoude: Debie & Verkuijl tuin park landschap. March 15, 2019), 84.

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