



**PIERRE
IJSBRAND
OSKAM**

Para Além do Controle:
Estratégias para a Agência do Design no Antropoceno

Beyond Control:
Strategies towards design agency in the Anthropocene





Universidade de Aveiro
Ano 2021

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Strategies towards design agency in the Anthropocene

Tese apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Doutor em Design, realizada sob a orientação científica do Doutor João António de Almeida Mota, Professor Auxiliar do Departamento de Comunicação e Arte da Universidade de Aveiro e a coorientação de Professora Associada Department of Landscape Architecture, Delft University of Technology Inge Bobbink



This research is funded by national funds,
the Foundation for Science and Technology
FCT - Portugal

o júri

presidente

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palavras-chave

antropoceno, além do controle, cultura-natureza, pós-humanismo, construtivismo ecológico, teoria fundamentada, agência de design, capacidade de resposta, fenomenologia, intervenção mínima, pesquisa-ação, montagem não linear

resumo

Esta tese oferece um apelo moral. Tem como objetivo inspirar os criadores, realizadores e pensadores a agirem estrategicamente, além do controle, batendo à porta da crise socioecológica no Antropoceno. Qual é o papel do design no Antropoceno? Que tipo de princípios éticos podem ser considerados? E o que isso significa para práticas "capazes de responder"? Essas questões a não linearidade metodológica desta tese.

Ação, reflexão, problema e solução são interdependentes e desdobram-se juntos, como as pétalas de uma rosa desabrochando. A complexidade pode ser absorvida com honestidade e não com confiança. A voz nesta tese é um 'eu' e 'eu' sou um construtivista ecológico. As bases para o construtivismo ecológico são as relações interpessoais, ou melhor, entre os atores. Lugares, objetos, processos e organismos são vistos como entidades entrosadas e são abordadas com uma sensibilidade 'tentacular': o objeto de estudo das humanidades não é mais 'homem'. Pesquisa e pesquisador, vida e vivência, local e situação estão inevitavelmente entrelaçados.

Cada "coisa" e cada "ação" são dados. Os dados são coletados por meio de lentes subjetivas e pessoais, combinando a prática do design com a teoria. Presume-se que, quando realizada ao longo do tempo, com honestidade e integridade, a investigação (sobre, por meio de, e, para design) pode aproximar-nos de formas de verdade. Com um palpite criativo, colete pistas como um caçador-coletor. Ao codificar, categorizar e interpretar como um detetive, com quadros como "entrosamento", "submersão" e "contaminação", a pesquisa emprega o método de abdução para desenvolver construções e teorias. Estas são então usadas para construir o argumento para os sete fundamentos morais significados como persuasões: aspirações normativas para agência de design no Antropoceno.

As ações de design podem concentrar-se em temas como: desdobramento conjunto; respondendo além do controle; amar nossos monstros; uma obrigação de desobediência; a forma segue o potencial e o ser (existência) na ficção do Antropoceno. A viagem então termina com um reencantamento da decência em relação a tudo o que importa, uma abordagem animista com uma lógica pragmática que vê o bem-estar de humanos, animais e ambientes profundamente conectados. Intervenções humanas seriam preferencialmente estabelecidas para permitir a administração "simpoética" autônoma do planeta, incluindo as intenções para o não intencional.

As implicações desta investigação estão relacionadas com o contexto e com o método. O uso recursivo de uma miríade de metodologias, desempenhando o seu papel em diferentes momentos da investigação, poderá dar resultados diferentes em outros contextos, o que poderá não ser consensual na comunidade científica. Por fim, o caráter exploratório, ao invés de explicativo, desta investigação revelou que o objetivo principal não é alcançar resultados, mas criar um palco no qual muitas perspectivas possam desdobrar-se: o resultado é que os resultados não são tudo o que conta em investigação mas a jornada é em si também um aspeto importante.

Atitude, ao invés de perseguir um fim (telos), está na essência de design agency consciente da impossibilidade de controle.

keywords

anthropocene, beyond control, nature-culture, posthumanism, ecological constructivism, grounded theory, design agency, response-ability, phenomenology, minimal intervention, action research, non-linear assemblage

abstract

This thesis provides a moral appeal. It sets out to inspire makers, doers and thinkers to strategically act, beyond control, in knocking at the door of socio-ecological crisis in Anthropocene. What is the role of design in the Anthropocene? What kind of ethical principles can be considered? And what does this imply for 'response-able' practices? These questions bind together the non-linear assemblage that this thesis is.

Action, reflection, problem and solution are interdependent and unfold together, like the petals of a blooming rose. Complexity may be absorbed with honesty rather than with confidence. The voice in this thesis is an 'I', and 'I' am an ecological constructivist. The grounds for ecological constructivism are inter-personal or rather inter-actor relationships. Places, objects, processes and organisms are seen as entangled entities and are approached with a 'tentacular' sensitivity: the humanities' object of study is no longer 'man.' Research and researcher, life and the living, site and situation are inevitably interwoven.

Every 'thing' and every 'action' are data. The data is collected through a personal, subjective lens combining design practice with theory. It is assumed that when carried out through time, with honesty and integrity, research (about, through and for design) can bring us closer to morphs of truth. With a creative hunch, I collect clues as a hunter-gather. By coding, categorizing and interpreting like a detective, with frames such as 'entanglement', 'submergence' and 'contamination' the research employs the method of abduction to develop constructs and theories. These are then used to build the argument for seven moral pleas meant as persuasions: normative aspirations for design agency in the Anthropocene.

Design actions may focus on themes such as: *unfolding together; responding beyond control; loving our monsters; an obligation to disobedience; form follows potential and being into Anthropocene fiction.* The journey then concludes with a *re-enchantment of decency* towards all that matters, an animistic approach with pragmatic logic that sees the wellbeing of humans, animals and environments as deeply connected. Human interventions would preferably set out to enable autonomous 'sym-poietic' stewardship of the planet by including intentions for the unintentional.

The implications of this research are related to context and method. A recursive use of a myriad of methodologies, playing their role at different moments of the research, may have given completely different results in another context, which may not appeal to all researchers. Eventually the exploratory, rather than explanatory nature of this research, revealed one thing: the main aim is not to achieve results, but to create a stage on which many perspectives can unfold: the result is that results are not all that counts.

Attitude, rather than telos, lies at the heart of design agency beyond control.

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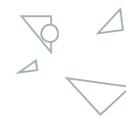
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BEYOND CONTROL

Dissertation submitted to the University of Aveiro, Department of Communication and Arts and the University of Porto, Faculty of Fine Arts at the Institute of Design, Media and Culture (ID+) Strategic Design Lab in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Design

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dedicated to

life as an adventure;
imagination;
compassion;
inspiration;
creativity;
courage;
love;
curiosity;
spontaneity;
vulnerability;
inventiveness;
a soul for every
'thing'

it was an incredible
journey

(de)constructing
ecology_of_truths
grounded-theory
intuitive_data
dynamic_hypothesis
multiple_realities
understanding_problems
critical_realism
inspiring_others

position

I am an ecological constructivist
within the dimension of critical realism
morality could be objective but perception is not
the grounds for ecological constructivism
are inter-actor relationships
every thing + every action + interpretation = data

thesis

with this thesis I provide a moralistic appeal
a *mindset* for makers and thinkers, to be sensitive
maker-thinkers to deal, beyond control, with
issues complex to respond to- to politely knock at
the door of socio-ecological crisis in Anthropocene

knowledge

is rooted in the complex interplay
of social relationships between
everything that exists
object-oriented ontology

method

I collect data through a subjective lens
a lens carried with time, honesty and integrity
I collect data that I have put in relation to
each-other
like a hunter-gatherer
to de-cypher complex matter
I use coding, categorizing and interpretation,
they lead to constructs, theories
building the argument
for the attitudes, moral pleads

others

can benefit from this study by seeing this work as
a starting point in seeking ad hoc strategies; dare
to step into the uncertainty of indeterminacy and
be comfortable with not-knowing the outcome,
and partake in a joint journey towards new
agendas

ABSTRACT

This thesis provides a moral appeal. It sets out to inspire makers, doers and thinkers to strategically act, beyond control, in knocking at the door of socio-ecological crisis in Anthropocene. What is the role of design in the Anthropocene? What kind of ethical principles can be considered? And what does this imply for 'response-able' practices? These questions bind together the non-linear assemblage that this thesis is.

Action, reflection, problem and solution are interdependent and unfold together, like the petals of a blooming rose. Complexity may be absorbed with honesty rather than with confidence. The voice in this thesis is an 'I', and 'I' am an 'ecological constructivist'. The grounds for ecological constructivism are inter-personal or rather inter-actor relationships. Places, objects, processes and organisms are seen as entangled entities and are approached with a 'tentacular' sensitivity: the humanities' object of study is no longer 'man.' Research and researcher, life and the living, site and situation are inevitably interwoven.

Every 'thing' and every 'action' are data. The data is collected through a personal, subjective lens combining design practice with theory. It is assumed that when carried out through time, with honesty and integrity, research (about, through and for design) can bring us closer to morphs of truth. With a creative hunch, I collect clues as a hunter-gather. By coding, categorizing and interpreting like a detective, with mosaics such as 'entanglement', 'submergence' and 'contamination' the research employs selective coding to develop constructs and theories. These are then used to build the argument for moral pleas meant as persuasions: normative aspirations for design agency in the Anthropocene.

Design actions may focus on themes such as: *unfolding together; responding beyond control; loving our monsters; the obligation to disobey; form following potential and being into Anthropocene fiction*. The journey then concludes with a *re-enchantment of decency* towards all that matters, an animistic approach with pragmatic logic that sees the wellbeing of humans, animals and environments as deeply connected. Human artistic and technological interventions would preferably set out to enable sym-poietic stewardship of the planet by including intentions for the unintentional and minimal interventions redirecting attention to complexity.

The implications of this research are related to context and method. A recursive use of a myriad of methodologies, playing their role at different moments of the research, may have given completely different results in another context, which may not appeal to all scholars. Eventually the exploratory, rather than explanatory nature of this research, revealed one thing: the main aim is not to achieve results, but to create a stage on which many perspectives can unfold: the result is that results are not all that counts.

Attitude, rather than telos, lies at the heart of design agency beyond control.

KEYWORDS

anthropocene
grounded theory
minimal intervention
ecological constructivism
non-linear assemblage

FIELDS OF RESEARCH

strategic design
humanities
communication & arts
fine arts
landscape architecture

ACKNOWLEDGEMENTS

I wish to express my profound gratitude to Prof. Dr. João Almeida Mota for his guidance, patience and constant encouragement throughout the multitude of experiences that accompanied this doctoral journey. I remember the day he welcomed me in his office at the University of Aveiro as if it were yesterday. Little did I know that we would be spending many hours in that office, discussing method, purpose and structures in literature and life. Neighbouring the department of music, live classical music and opera became a familiar background setting.

During this journey, João has always reminded me to follow my intrinsic motivations and research honestly. There is no need to reshape yourself to please someone else: it is the only way to build a strong, durable voice as a vehicle towards the future. His perseverance and guidance have played an irreplaceable role in my growth towards independent critical thinking and confidence in setting up my own constructs. His consistent presence by email, meetings and online calls allowed my story of coming of age as a researcher to unfold authentically and naturally. I have enjoyed attention, affirmation, calmness, optimism, safety and continuance. These virtues are fine fertile conditions in which to grow intellectually. I am forever grateful for this treatment, which I consider to be one of the greatest privileges in life. This PhD and João's guidance have taught me that honesty can pave the way to intrinsic, authentic movement and thus meaningful contributions to the world. I also wish to express my gratitude to Prof. Dr. Ir. Inge Bobbink, who welcomed me at the Landscape Architecture section at Delft University of Technology. As co-supervisor, she made me feel believed and supported in pursuing my non-linear endeavours. It was important to receive this affirmation from my home university.

I felt empowered to continue my research in an inductive way what helped me to reflect upon earlier experiences. Justifying this approach was a journey in itself, as I had to unlearn my entrenched ideas of 'good research'.

As well, I want to show my appreciation for the many bright and kind minds I have met along the way: those willing to give me assistance, advise and even better, offer constrictive criticism and inspiration. Firstly, I want to say thanks to Lea Laursen in Aalborg for our psycho-geographical adventures through Jutland; Marco Casagrande for showing me his animistic architecture practice in Helsinki; Fatima Pombo for enchanting philosophy of design in Porto; Frits van Loon for sharing his source of passion in Delft; Leo van den Burg for recognizing my passion for creativity in Delft; Pirjo Haikola in Helsinki for our interesting talks about the non-human; Saskia de Wit for her sharp and guiding suggestions in Delft; Bieke Cattoor for involving me with the Anthropocene garden elective in Delft; Ânes Moreira and Miguel Costa for their interesting talks and conference in Porto; Henriette Bier for seeing the beauty and technicality in my project in Rotterdam; Andrea Kahn and Lisa Diedrich for sharing their ideas on design criticality in Barcelona.

During this journey, I also met other PhD students. The PhD experience creates a connection through which we were able to relate to each other's struggles. Firstly, I am grateful to the other PhD students enrolled in the Design programme. My particular thanks go to Igor and José in Porto, who helped me understand the Portuguese world a little better. I want to thank Joaku in Madrid who was always full of imagination. I want to thank Sitong in Delft for her ever careful and dedicated attitude towards taking research seriously. I thank Tim in Wageningen for his kind and empowering \

reasoning. I thank Huub in Rotterdam for his encouraging words and help with the abstract. I thank Annemarie for her support and understanding of doing open-ended projects.

During this period, I received the FCT¹ grant, which gave me my monthly living allowance, enabling wanderings through Europe, to conferences and through literature. The ECIU grant made it possible for me to go to Aalborg University and stay as a visiting researcher.

We meet people in places everywhere we go. Access to those places is vital. I want to thank the University of Aveiro and the Department of Communications and Arts for access to the PhD room and the Creative Science Park. Also, the University of Porto, Faculty of Fine Arts, for access to their library and the UPTEC startup incubator building, where I spent many days writing. I have also been welcomed by many other universities along the way. At two of them, I enjoyed a period as visiting researcher: Delft University of Technology and Aalborg University. I thank those institutions for allowing me access to their environments. Along the way, I tried to do everything on my own, until I realized that I can't. In fact nobody can't: we need to work together. I thank Max, for taking part in the 3D modelling and printing, particularly towards the end of the project.

Last but definitely not least, come those who are your rocks in the environments in which you live: friends and family. My friends and rocks in Portugal were Zé-Mario, Carla and Panda; in Holland they were Huub, Gerben, Basia, Leonard and more friends in Rotterdam. Drifting alone through Europe for such a long period taught me one thing: the capacity to connect is important.

The values you grow up with bear fruit for the future if you are provided with fertile soil and a conviction of the good things. Those values can make you resilient in facing setbacks. I have always been encouraged by my parents, IJs and Agnes, to explore the world, challenge ideas and look at matters from multiple perspectives. On the sideline, my sister and brother.

To meet the challenges of life, we need an attitude. To continue on this PhD journey, I needed humour, creativity, a willingness to work at irregular times and integrating life with everyday critical thinking. I needed passion for the project, to keep on with this work. I want to thank everyone else in my community, those who I have lived with and those who have worked with me. Although I felt lonely at times, my search was secured by an environment full of love, dedication and passion for the world in its totality, a multi-species family. Feelings, ideas and thoughts are undeniably entangled.

The PhD journey is guided by many unconscious thoughts and fears. This journey has been tougher than I ever imagined, but I came to Portugal to learn about another culture, world and language while anticipating this journey. I have spent the last three-and-a-half years branching off in my perception of the world and being able to enrich it with my own colors. To have had this opportunity, that was bigger than me and a process beyond my own control, humbles me.

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LEXICON

The following explanations are used to deepen in about the lexicon throughout this thesis. Some of those texts are verbatim quotes coming from literature, others from dictionaries, others collections of definitions on the internet. It is recommended to see those terms as a way to give more depths behind the words used in this thesis. The quotes and descriptions of the concepts are only used to give an impression of their meaning.

A

Abandonment '1 cease to support or look after (someone); desert: her natural mother had abandoned her at an early age. • leave (a place or vehicle) empty or uninhabited, without intending to return: derelict houses were abandoned. • (abandon someone/something to) condemn someone or something to (a specified fate) by ceasing to take an interest in them: an attempt to persuade businesses not to abandon the area to inner-city deprivation.

2 give up completely (a practice or a course of action): he had clearly abandoned all pretence of trying to succeed | negotiations were abandoned and fighting intensified. • discontinue (a scheduled event) before completion: fans invaded the pitch and the match was abandoned.

3 (abandon oneself to) allow oneself to indulge in (a desire or impulse): they abandoned themselves to despair. ORIGIN: late Middle English: from Old French abandoner, from a- (from Latin ad 'to, at') + bandon 'control' (related to ban1). The original sense was 'bring under control', later 'give in to the control of, surrender to' (abandon (sense 3 of the verb)).(Oxford dictionary of English, 2020).

Abundance '1 a very large quantity of something: the tropical island boasts an abundance of wildlife • the state or condition of having a copious quantity of something; plentifulness: vines and figs grew in abundance | she was blessed with talent and charm in abundance • plentifulness of the good things of life; prosperity: the growth of industry promised wealth and abundance. Origin: from Latin abundantia, from abundant- 'overflowing', from the verb abundare' (Oxford dictionary of English, 2020).

Actor network theory Actor Network Theory or ANT is a constructivist approach to social theory developed by Michel Callon, Bruno Latour and John Law. The approach counts all social and natural realms as shifting networks of relationships. ANT argues that those relationships are the dimension in which everything exists. To approach a phenomena, we must take in account that all parts of the situation play a role in interacting and setting up the situation. Also objects, ideas, non-humans, processes, expectations and more play a role in the social understanding of a situation. It helps to look at a situation in a wider frame of actors than the human. It is especially interesting how animals, processes, humans and objects gain equal treatment. Read: Reassembling the Social: An Introduction to Actor-Network-Theory (Latour, 2005).

Agency The way designers plan, plant, guard and harvest values. The positioning of a designer influences the character of the ideas and concepts they have to work with, their background and context will influence how those ideas will be translated into design. Action is influenced by thought. The character of agency is directly influenced by the attitudes the designer takes towards issues.

Agent '(1) a person who acts on behalf of another person or group (2) a person or thing that takes an active role or produces a specified effect late Middle English (in the sense 'someone or something that produces an effect'): from Latin agent- 'doing', from agere' (New Oxford American Dictionary, 2020).

Animism '(from Latin: anima, 'breath, spirit, life') is the belief that objects, places, and creatures all possess a distinct spiritual essence. Potentially, animism perceives all things—animals, plants, rocks, rivers, weather systems, human handiwork, and perhaps even words—as animated and alive. Animism is used in the anthropology of religion as a term for the belief system of many indigenous peoples, especially in contrast to the relatively more recent development of organized religions.' Website <https://en.wikipedia.org/wiki/Animism> retrieved 30 September 2020.

Anamnesis '1 recollection, especially of a supposed previous existence. 2 [count noun] Medicine a patient's account of their medical history. 3 Christian Church the part of the Eucharist in which the Passion, Resurrection, and Ascension of Christ are recalled ORIGIN late 16th century: from Greek anamnēsis 'remembrance'' (Oxford dictionary of English, 2020).

Anthropocene The Anthropocene indicates a new epoch where human existence is considered as a geological force. The notion introduces a new narrative about the role and meaning of human existence on earth. Especially those who are related with the environment (in fact we all are), creating awareness about how this narrative links with their actions is a debate that touches questions and problems of complexity, urgency and responsibility. See Chapter 3 Submerged.

Anthropocene monsters Term lended from Ulstein to describe untamable results of human creations: 'Enter Anthropocene monsters: the ominous, seemingly out-of-control creatures with the promise of apocalypse trailing behind them in the smog. As opposed to Frankenstein's creature, they do not have voices of their own, and yet their questions are screaming to be heard. They not only ask us why we created them, but also how we can survive them' (Ulstein, 2017, p. 75).

Anthropocentrism 'The philosophical viewpoint arguing that human beings are the central or most significant entities in the world. This is a basic belief embedded in many Western religions and philosophies. Anthropocentrism regards humans as separate from and superior to nature and holds that human life has intrinsic value while other entities (including animals, plants, mineral resources, and so on) are resources that may justifiably be exploited for the benefit of humankind.' Text from website <https://www.britannica.com/topic/anthropocentrism> access date 30 September 2020.

Appolonian and Dionysian 'The Apollonian and Dionysian is a philosophical and literary concept represented by a dichotomy, or dialectic, between the figures of Apollo and Dionysus from Greek mythology. Its usage is widely attributed to the work *The Birth of Tragedy* by Friedrich Nietzsche. The concept has since been widely invoked and discussed within Western philosophy and literature. In Greek mythology, Apollo and Dionysus are sons of Zeus. Apollo is the god of the sun, of rational thinking and order, and appeals to logic, prudence and purity. Dionysus is the god of wine and dance, of irrationality and chaos, and appeals to emotions and instincts. The Ancient Greeks did not consider the two gods to be opposites or rivals, although they were often entwined by nature.' Website: https://en.wikipedia.org/wiki/Apollonian_and_Dionysian Retrieved 30 September 2020.

Art-research An artist-researcher would give room to his subjective position in research. Instead of trying to determine and clarify everything, the unfolding of the research might benefit from intuitive, irrational choices since it explores alternative paths: 'The popular image of the fine artist as expressive lunatic does not allow sufficiently for the cognitive tradition in art: a tradition which has in fact been called 'research', Nor does it allow for the fact that art happens in a social, technical and cultural World. The popular image of the designer as style warrior: superficial, trendy, obsessed with surfaces and signs: does not allow sufficiently for the research and methods tradition in design, of indeed for the tacit use of those methods by designers - to say nothing of applied semiotics. the popular image of the scientist: as critical rationalist, engaged in fundamental research and shouting things like 'Eureka' or 'it's a crazy idea but it just might work' the image against which a lot of research tends still to be judged, is equally wide 01 the mark. Doing science - as opposed to post-rationalising about science - just doesn't seem to be like that. if recent researches into the

philosophy and sociology of science are any guide. Doing science is much more like doing design.' (Frayling, 1993, p. 3) .

As found An approach to the site specific. It is an approach that tries to work with the elements that are available at the moment, right away.

Attunement 'To attune: make receptive or aware: a society more attuned to consumerism than ideology. • accustom or acclimatize: students are not attuned to making decisions. • make harmonious: the interests of East and West are now closely attuned.' (Oxford dictionary of English, 2020).

B

Becoming In philosophy, the word 'becoming' concerns a specific ontological concept studied also by process philosophy as a whole or with the related study of process theology, and Heraclitus is commonly regarded as the 'founder of the process approach' due to his radical flux doctrine.

Bildung Theory of Bildung" by Wilhelm von Humboldt, Chapter 3 in Teaching As A Reflective Practice: The German Didaktik Tradition edited by Ian Westbury, Stefan Hopmann, Kurt Riquarts

Burglar approach A self given term to actively breaking in, climbing walls or literary going off the normal paths in order to create a different perspective on the place. It is used to gain confidence to 'stalk' a place. Also used for Urbex: Urban Exploring. It is believed that trespassing abandoned properties let the visitor think beyond constraints of land-owner ship. Can land be property anyway? In their time of 'vacancy', the place does not stop: life and becoming keep going on. See Mosaic 4: Wandered.

C

Changescapes Ross Gibson calls the aesthetic forms that 'dramatise' change, changescapes. In their form, material and matter they seem to communicate ongoing change: never finished. According to Ross, they help us to understand and accept complexity and help us know mutability. They do so by making us part of their ephemeral, contingent, fragile changefulness. Gibson (2005). With this explanation, he pinpoints the meaning for doing research through art for approaching complex processes.

Chthulucene, 'a word derived from chthon, meaning "earth" in Greek and which is associated with things that dwell in or under the earth. The Chthulucene, refers to processes of reworlding. The path towards something that might possibly have a chance of living on, Haraway argues, is through the activation of the chthonic powers that are within our grasp, as we collect up the waste of the Anthropocene and the exterminism of the Capitalocene' (Haraway, 2014). Found in: <http://compendium.kosawese.net/term/anthropocene-capitalocene-chthulucene/>

Condensed Term used in this thesis in order to describe the purpose of chapter 8. The terms have been a coding, signaling to organize data long this thesis design process. Condensed is an analogy for concluding data in a different form as it was before.

Contaminated 'The action or state of making or being made impure by polluting or poisoning' (Oxford dictionary of English, 2018). I think becoming impure is bound to happen: it is a matter of how we are influenced and aware of encounters (see Chapter 6 Contaminated). It is not negative but it underlines connectivity and a resistance against it.

Contextual unfolding The way futures unfold through the interrelations with the contexts. This basically means to stay in the middle, give time and space the opportunity to influence your work and perception. Instead of searching for a pre-determined factor, let this factor be derived from

patterns and clues in the context.

Critical realism Critical Realism divides the idea of the real as a realm that we can never totally grasp. Within this branch of philosophy, there is a difference between the real world and the “observable” world.

Critters Haraway (2016) uses the term to describe creatures on earth, including humans, non-humans, microbes, algae, plants, machines and cyborgs. She argues that the term is more inclusive.

Cultivation Transforming a site through cultivation by altering the flow of things through a certain tradition. The space is a vehicle of human use, that over time alters the place and constantly reinterprets its meaning. It is much like continuity, but introduces an aspect where programme and place interact. Here, there is a more open approach towards the moment, the now is present and becomes the vehicle for moving from the now to the future.

Cyborg ‘A fictional or hypothetical person whose physical abilities are extended beyond normal human limitations by mechanical elements built into the body. ORIGIN 1960s: blend of cyber- and organism’ (Oxford dictionary of English, 2020).

Cyborg Manifesto, ‘is an essay written by Donna Haraway and published in 1985 in the Socialist Review. In it, the concept of the cyborg is a rejection of rigid boundaries, notably those separating “human” from “animal” and “human” from “machine”. She writes: “The cyborg does not dream of community on the model of the organic family, this time without the oedipal project. The cyborg would not recognize the Garden of Eden; it is not made of mud and cannot dream of returning to dust.” The “Manifesto” criticizes traditional notions of feminism, particularly feminist focuses on identity politics, and encourages instead coalition through affinity. She uses the figure of the cyborg to urge feminists to move beyond the limitations of traditional gender, feminism, and politics; the “Manifesto” is considered one of the milestones in the development of feminist posthumanist theory’ (Francesca, 2014). Website https://en.wikipedia.org/wiki/A_Cyborg_Manifesto Retrieved September 8 2020.

D

Dasein For Heidegger, the human subject had to be reconceived in an altogether new way, as “being-in-the-world.” Because this notion represented the very opposite of the Cartesian “thing that thinks,” the idea of consciousness as representing the mind’s internal awareness of its own states had to be dropped. With it went the assumption that specific mental states were needed to mediate the relation of the mind to everything outside it. The human subject was not a mind that was capable only of representing the world to itself and whose linkage with its body was merely a contingent one. According to Heidegger, human being should instead be conceived as Dasein, a common German word usually translated in English as “existence” but which also literally means “being there.” By using it as a replacement for “consciousness” and “mind,” Heidegger intended to suggest that a human being is in the world in the mode of “uncovering” and is thus disclosing other entities as well as itself. Dasein is, in other words, the “there”—or the locus—of being and thus the metaphorical place where entities “show themselves” as what they are. Instead of being sealed off within a specially designed compartment within a human being, the functions that have been misdescribed as “mental” now become the defining characteristics of human existence’ Website: <https://www.britannica.com/topic/philosophical-anthropology/Heidegger-and-humanism#ref1011552> retrieved at 30 September 2020.

Degrowth ‘A social, political and economic movement that critiques the paradigm of economic growth. Part of a theory of Anti-consumerism, that is concerned about the depletion of resources

and ecological footprint that productivism causes. Degrowth can be linked to the Arts and Crafts movement (1819-1900) since it is an anti-industrialist response. As well it can be linked to the Club of Rome and their report *The Limits to Growth* (1972). A leading figure in this movement is Serge Latouche, a professor of economics. The book *Small is Beautiful* (1973) from E.F.Schumacher we can already find a critique to the neo-liberal model of economic development' (Kallis, et al., 2018).

De-industrialization 'a process of social and economic change caused by the removal or reduction of industrial capacity or activity in a country or region, especially of heavy industry or manufacturing industry.' Website: <https://en.wikipedia.org/wiki/Deindustrialization> Acces Date 2 October 2020.

Denialism 'the term climate change denial describes denial of the scientific consensus that the climate change of planet Earth is a real and occurring event primarily caused by human activity. The forms of denialism present the common feature of the person rejecting overwhelming evidence and the generation of political controversy with attempts to deny the existence of consensus. The motivations and causes of denialism include religion, self-interest (economic, political, or financial), and defence mechanisms meant to protect the psyche of the denier against mentally disturbing facts and ideas.' Website: <https://en.wikipedia.org/wiki/Denialism> Acces Date 2 October 2020.

Dérive "'drift" is a revolutionary strategy originally put forward in the "Theory of the Dérive" (1956) by Guy Debord, a member at the time of the Letterist International. Debord defines the dérive as "a mode of experimental behavior linked to the conditions of urban society: a technique of rapid passage through varied ambiances." It is an unplanned journey through a landscape, usually urban, in which participants drop their everyday relations and "let themselves be drawn by the attractions of the terrain and the encounters they find there." <https://en.wikipedia.org/wiki/D%C3%A9rive> Acces Date 2 October 2020.

Designer-intervener Creators of new relationships through design that consciously intervene with invisible processes.

Détournement, "rerouting, hijacking" in French, is a technique developed in the 1950s by the Letterist International,[1] and later adapted by the Situationist International (SI), that was defined in the SI's inaugural 1958 journal as "[t]he integration of present or past artistic productions into a superior construction of a milieu. In this sense there can be no situationist painting or music, but only a situationist use of those means. In a more elementary sense, détournement within the old cultural spheres is a method of propaganda, a method which reveals the wearing out and loss of importance of those spheres." Website <https://en.wikipedia.org/wiki/D%C3%A9tournement> Acces Date 2 October 2020.

Difference / Repetition 'Deleuze argued against the devaluation of "difference" in Western metaphysics and tried to show that difference inheres in repetition itself. A central theme of Deleuze's work during this period was what he called the "Eleatic-Platonic bias" of Western metaphysics—i.e., the preference, which originated with the pre-Socratic school of Eleaticism and the subsequent philosophy of Plato, for unity over multiplicity ("the one" over "the many") and for sameness over difference. According to Deleuze, this bias, which manifests itself in the characteristic philosophical search for the abstract "essences" of things, falsifies the nature of experience, which consists of multiplicities rather than unities. In order to do justice to reality as multiplicity, therefore, a completely new set of philosophical concepts is required. Deleuze also criticized traditional metaphysics for its "arboreal" or "treelike" character—i.e., its conception of reality in terms of hierarchy, order, and linearity—and compared his own thought, by contrast, to the structure of a rhizome, an underground plant stem whose growth is aimless and disordered.' Website: <https://www.britannica.com/biography/Gilles-Deleuze#ref839407> Access Date 2 October 2020.

Dutch Design Week Dutch Design Week is the largest annual design event in Northern Europe and presents work and concepts from more than 2,600 designers to more than 355,000 visitors from home and abroad. The event is about Dutch design, hosted in Eindhoven, Netherlands.

Dynamic hypothesis is a dynamic relationship between question and assumed answer that are encouraged to shift into new directions. The hypothesis is used to explore new perspectives, rather than to frame the research field. Question and answer co-evolve.

E

Elephant paths The funny paths pedestrians or bikers make when taking a shortcut over the grass, ignoring city planning.

Emergence '1 the process of becoming visible after being concealed: I misjudged the timing of my emergence. • the escape of an insect or other invertebrate from an egg, cocoon, or pupal case: the parasite's eggs hatch synchronously with the emergence of the wasp larvae. 2 the process of coming into existence or prominence: the emergence of the environmental movement ORIGIN mid 17th century (in the sense 'unforeseen occurrence'): from medieval Latin emergentia, from Latin emergere 'bring to light' (see emerge)' (Oxford dictionary of English, 2020).

Energy sinks Borrowed from Rod Barnett's Emergence in Landscape architecture. Barnett (2013) argues that places that need constant maintenance to exist are literal 'Energy Sinks': areas that cost energy instead of store it. Design and interventions of places that are sensitive to the inherent processes present at the location can be more capable to store the existing energies instead of going against them.

Entangle-mind A mindset considering a wholeness of actors within the large complexity of contemporary problems, being receptive to the contextual knowledge, acknowledging informed subjectivity always is contaminated

Entangled involved (someone) in difficulties or complicated circumstances from which it is difficult to escape.

Entropy A property of thermodynamical systems. The term entropy was introduced by Rudolf Clausius who named it from the Greek word, "transformation". He considered transfers of energy as heat and work between bodies of matter, taking temperature into account. Bodies of radiation are also covered by the same kind of reasoning.

Ex Nihilo Literary: from out of nothing. The term is used to explain projects and attitudes that approach the existing context as a clean slate, free from contamination by its past and surrounding.

F

Fabulist A person who composes or relates fables. Inspired by Haraway's way of speaking, creating new literacy for new viewpoints through storytelling and made-up words.

Flâneur 'A French noun referring to a person, literally meaning 'stroller', 'lounger', 'saunterer', or 'loafer', but with some nuanced additional meanings (including as a loanword into English). Flânerie is the act of strolling, with all of its accompanying associations. A near-synonym of the noun is boulevardier. Traditionally depicted as male, a flâneur is an ambivalent figure of urban affluence and modernity, representing the ability to wander detached from society with no other purpose than to be an acute observer of industrialized, contemporary life.' Website: <https://en.wikipedia.org/wiki/Fl%C3%A2neur> access date 20 September 2020.

Floating attention Term used in this thesis to explain the approach of sites. From Bernard Lassus'

inventive analysis: ‘... going beyond first ignorance with its feeling of absence or of disorganized accumulations, in order to approach the site in its singularity. This is done, first by *‘floating attention’*, becoming impregnated with the site and its surroundings, in the course of long visits at different hours and in different weathers, to soak it up from the ground to the sky until boredom sets in, or almost.’ In: *The Landscape Approach*, 1998, p. 57.

Fluxus ‘A loose international group of artists, poets, and musicians whose only shared impulse was to integrate life into art through the use of found events, sounds, and materials, thereby bringing about social and economic change in the art world. More than 50 artists were associated with Fluxus, many producing a periodical anthologizing the latest experiments across the world in art and antiart, music and antimusic, and poetry and antipoetry and many taking part for the sheer collaboration opportunities and the built-in audience. Fluxus involved artists from around the world, including the Americans Dick Higgins and Alison Knowles, the Frenchman Ben Vautrier, the Korean artist Nam June Paik, and the German artist Wolf Vostell.’ Text from Website: <https://www.britannica.com/art/Fluxus> Access date 30 September 2020.

Fourth Nature Fourth Nature or Forsaken Landscape. Fourth nature is a type of nature that manages to live in spite / because of capitalism. The Forsaken Landscape is that layer in our environment that is the locus of Fourth Nature - a mixture, an abandoned, overlooked cyborg landscape. See *Mosaic 4 Scattered*.

Frankensite A boundless, disorganised area, existing of displaced assemblages of artefacts that mirror short-term anthropocentric desires, but is not been care for responsibly regarding longer time frames and impacts on larger scales.

Fuck the Context A famous saying by Rem Koolhaas. He means with this, that context does not always have to be the guide for the design: sometimes projects can also bring new meaning and purpose to places.

Fuzzy front end The vague, uncertain, open-ended first phase of a project, where many new influences can come and are influential. Often used in to describe the open, uncertain parts at the start of a (design) process.

G

Gaia Hypothesis, the ‘The Gaia Hypothesis. Gaia hypothesis, model of the Earth in which its living and nonliving parts are viewed as a complex interacting system that can be thought of as a single organism. Developed c. 1972 largely by British chemist James E. Lovelock and U.S. biologist Lynn Margulis, the Gaia hypothesis is named for the Greek Earth goddess. It postulates that all living things have a regulatory effect on the Earth’s environment that promotes life overall; the Earth is homeostatic in support of life-sustaining conditions. The theory is highly controversial’ (Encyclopædia Britannica, 2019; www.britannica.com/science/Gaia-hypothesis accessed on September 16, 2020).

Genius Loci ‘Latin term meaning ‘the genius of the place’, referring to the presiding deity or spirit. Every place has its own unique qualities, not only in terms of its physical makeup, but of how it is perceived, so it ought to be (but far too often is not) the responsibilities of the architect or landscape-designer to be sensitive to those unique qualities, to enhance them rather than to destroy them. Alexander Pope, in Epistle IV (1731) of his *Moral Essays*, addressed to Lord Burlington, states in his Argument that, ‘instanced in architecture and gardening,... all must be adapted to the genius of the place, and... beauties not forced into it, but resulting from it’. Batey (1999); Goulty (1991); Norberg-Schulz (1980a). *A Dictionary of Architecture and Landscape Architecture*. . Retrieved August 11, 2020 from Encyclopedia.com: <https://www.encyclopedia.com/education/dictionaries->

thesauruses-pictures-and-press-releases/genius-loci

Giant Standing on the shoulders of giants. A saying used by writers and scholars such as Chartres and Newton, to refer to the understanding that knowledge and intellectual progress comes from the understanding of those who have contribute to knowledge in the past.

Grounded theory Developed by socialists Barney Glaser and Anselm Strauss, Grounded Theory (GT) is a way of thinking about and conceptualizing data. The Discovery of Grounded Theory (1967) helped to legitimize qualitative research, meaning and a dynamic method / hypothesis. This method showed useful in reaching the richness of complexity and processes and gives serious meaning to symbolism and concepts as way to inquire and analyse data.

H

Heterotopia Coined by Michel Foucault in his early texts. Heterotopias have the strange property to mirror or represent fragements of multiple places at once, that in their assemblage can be contradicting.

Homo Dominatus 'the dominating mankind' The term is used to designate the human tendency to control.

Homo Ludens 'the playing mankind' 'A book originally published in Dutch in 1938 by Dutch historian and cultural theorist Johan Huizinga It discusses the importance of the play element of culture and society. Huizinga suggests that play is primary to and a necessary (though not sufficient) condition of the generation of culture. The Latin word ludens is the present active participle of the verb ludere, which itself is cognate with the noun ludus. Ludus has no direct equivalent in English, as it simultaneously refers to sport, play, school, and practice '(Wikipedia, 2020).

Hortus Testis A garden to witness the earth. Witness, in order to (re)connect, partake, de-sign, design.

Hubris 'Hubris, Greek hybris, in ancient Athens, the intentional use of violence to humiliate or degrade. The word's connotation changed over time, and hubris came to be defined as overweening presumption that leads a person to disregard the divinely fixed limits on human action in an ordered cosmos' (Encyclopædia Britannica, 2017; www.britannica.com/topic/hubris Access Date September 16, 2020).

Human condition Human condition. The condition of being human, being in a human body, acting and thinking on earth: having to yield to the state that we are in.

Hyperobjects 'The introduction argues that hyperobjects have activated a philosophical "earthquake" that compels us to refashion what we mean by a thing in the first place (ontology). Morton (2011) argues that hyperobjects have five properties. Hyperobjects are viscous: they stick to us and penetrate us, thus abolishing concepts of distance and norms concerning meaning and propriety (metalanguage). Hyperobjects are nonlocal: they do not manifest at a specific time and place but rather are stretched out in such a way as to challenge the idea that a thing must occupy a specific place and time. Hyperobjects have a temporality so different from current human ones that they force us to drop the idea of time as a neutral container. Instead, hyperobjects "emit" time just like planets (Einstein). Hyperobjects occupy high dimensional phase spaces that are unavailable to direct human perception. Computational prosthetics are required even to think them (mapping global warming requires petaflops of computing speed, for instance).Hyperobjects exist "interobjectively," which is to say that they consist, of, yet are not reducible to, interactions between a large number of entities.Hyperobjects have three major implications for humans: "The end of the

world" as a meaningful horizon against which (human) events take shape has already occurred. Instead of inhabiting a world, we find ourselves on the insides of a number of hyperobjects. This fact reduces all human styles of engagement to forms of hypocrisy, thus ending the reign of cynicism (otherwise known as modernity). Culture has entered an age of asymmetry in which the nonhuman matches human cognition equally, but not in a neat Goldilocks way. Rather, humans are sandwiched between two giant beings that increase one another in a feedback loop: (human) reason and hyperobjects. Some contemporary art is already showing signs of this paradox.' Text from Timothy Morton's own website: <https://ecologywithoutnature.blogspot.com/2012/12/what-does-hyperobjects-say.html> Access date 30 September 2020.

I

In-your-face approach Joan Nassauer proposes an 'in your face' approach: a landfill in every yard, corporate headquarters sited at chemical dumps and a sense of ecological justice towards flooding and drought. This requires people to accept what they regard as ugly or uncomfortable in exchange for what is attractive and familiar. She concludes that acknowledging the fact that people take pride in familiar landscapes, it is unlikely that they will be open to this kind of idea: cultural expectations will continue to be measures of ecological function, at least in everyday experience. Orderly frames are thus a way to guard ecological qualities within a framework that residents can recognize culturally. They mark the presence of ecological qualities, recognized by the human eye (Nassauer, 2007, p. 169).

Intention (Latin: intentio), in scholastic logic and psychology, a concept used to describe a mode of being or relation. In knowing, the mind is said to "intend" or "tend toward" its object, and a thing as known, or in the knowing mind, has "intentional being." Intention may mean either the mind knowing or the knowledge itself, analogous to the use of perception for the act of perceiving or for the thing perceived. First intention is knowledge of a thing as it is in itself; second intention, knowledge of the thing as known. Thus, the term man is in first intention in the statement "man is mortal," but in second intention in "man is a species." Logic was held by the scholastics to consist of the study of second intentions. Website: <https://www.britannica.com/topic/intention-logic> Access date 30 September 2020.

Intentions for the unintentional are attitudes that are open for novel encounters and flows, but are not, and not trying to be, in control of what encounters or flows will happen.

Interventions for the unintentional are (physical) design projects that set up conditions for new encounters and flows to happen, but are not, and not trying to be, in control of what encounters or flows will happen.

Inventive analysis is an analysis that is informed at the moment by the site and does not fully restrict itself to pre-determined strategy. It rather leaves room for the unconscious and new encounters that are unexpected.

Inter-digested Term used in this thesis in order to describe the purpose of chapter 7. The terms of the chapters have been used as coding, signalling to organise data long this thesis design process. Inter-digestion is an analogy for merging the data together, almost processing it into something new. Just like the origin of modern cellularity, it is the result of indigestion, not sex: two bacteria eating each other but neither could digest the other, so they had to work together, and the cells came together.

Interpretivism 'A sociological approach that emphasizes the need to understand or interpret the beliefs, motives, and reasons of social actors in order to understand social reality' (Morris, 2008).

K

Kintsugi 'Kintsugi also known as kintsukuroi is the Japanese art of repairing broken pottery by mending the areas of breakage with lacquer dusted or mixed with powdered gold, silver, or platinum, a method similar to the maki-e technique. As a philosophy, it treats breakage and repair as part of the history of an object, rather than something to disguise.' Retrieved from <https://en.wikipedia.org/wiki/Kintsugi> at 07-09-2020.

L

Limits to growth, the 'A Report for the Club of Rome's Project on the Predicament of Mankind (1972). The group of scientist already investigated the relationship between the limits of the Earth system and the influence of human actions and noted the urge for social and economic stability, not growth. The Club of Rome has generally provided comprehensive updates to the book every five years.' https://en.wikipedia.org/wiki/The_Limits_to_Growth at 15-09-2021

M

Megafauna Megafauna are large animals. Since they are big, they play an important role in the transport of minerals and seeds over long distances. As well, due to their size, they play an important role in creating pathways through forests and keeping land open, resulting in more habitat diversity, possibilities for different species to dwell.

Messy frames Iteration on Nassauer's Orderly Frames, Messy Ecosystems. What if ecosystems aren't messy at all, but actually orderly in their own way? Would we be challenged to think about how the frames can be messy?

Minimal Interventions Interventions done with a simple, single act that cause big changes- on different scales in time and space than they seem to exist. The interventions are intelligent since they are aware of processes and flows that are existing at a site. Minimal interventions are done with an awareness for 'hyper objectivity'.

Mode of living Lewis and Maslin (2018) identify five modes of living: hunter-gatherer, agricultural, mercantile capitalist, industrial capitalist and consumer capitalist. These developments, made possible by technology such as the domestication of fire, the mobile printing press and the telegraph, do not mean that wellbeing and freedom progressed as well. And there is no natural law saying there are only five modes of living. Can five centuries of expansion, colonizing new places and peoples to exploit, continue?

Multispecies Nineteen Eighty-four, also published as 1984, novel by English author George Orwell published in 1949 as a warning against totalitarianism. The chilling dystopia made a deep impression on readers, and his ideas entered mainstream culture in a way achieved by very few books. The book's title and many of its concepts, such as Big Brother and the Thought Police, are instantly recognized and understood, often as bywords for modern social and political abuses (Encyclopædia Britannica, 2020; www.britannica.com/topic/Nineteen-Eighty-four accessed on September 16, 2020).

N

New wilderness With New Wilderness I mean not the an idea of pristine nature or re-wilding, but awareness of entanglement and the new aesthetic for a pro-wilderness mode of living. New Wilderness is my summary of terms and meaning for new things and processes that emerge beyond our control and need new approaches to be embraced instead of fought against.

'Nineteen Eighty-four also published as 1984, novel by English author George Orwell published in 1949 as a warning against totalitarianism. The chilling dystopia made a deep impression on readers, and his ideas entered mainstream culture in a way achieved by very few books. The book's title

and many of its concepts, such as Big Brother and the Thought Police, are instantly recognized and understood, often as bywords for modern social and political abuses' (Encyclopædia Britannica, 2020; www.britannica.com/topic/Nineteen-Eighty-four accessed on September 16, 2020).

Noise-wise Noise-wise. The wisdom to find a direction in a world full of distractions, bulks of information. I lend this word from the doctoral forum UD17: NOISE-WISE, open to all PhD students. The conference was organised by PhD students from the PhD Design programme.

O

'Object oriented ontology In metaphysics, object-oriented ontology (OOO) is a 21st-century Heidegger-influenced school of thought that rejects the privileging of human existence over the existence of nonhuman objects. This is in contrast to what it calls the "anthropocentrism" of Kant's Copernican Revolution, as accepted by most other current metaphysics, in which phenomenal objects are said to conform to the mind of the subject and, in turn, become products of human cognition. Object-oriented ontology maintains that objects exist independently (as Kantian noumena) of human perception and are not ontologically exhausted by their relations with humans or other objects. For object-oriented ontologists, all relations, including those between nonhumans, distort their related objects in the same basic manner as human consciousness and exist on an equal footing with one another. Object-oriented ontology is often viewed as a subset of speculative realism, a contemporary school of thought that criticizes the post-Kantian reduction of philosophical enquiry to a correlation between thought and being (correlationism), such that the reality of anything outside of this correlation is unknowable. Object-oriented ontology predates speculative realism, however, and makes distinct claims about the nature and equality of object relations to which not all speculative realists agree. The term "object-oriented philosophy" was coined by Graham Harman, the movement's founder, in his 1999 doctoral dissertation "Tool-Being: Elements in a Theory of Objects". In 2009, Levi Bryant rephrased Harman's original designation as "object-oriented ontology", giving the movement its current name.' Website: https://en.wikipedia.org/wiki/Object-oriented_ontology Acces Date 2 October 2020.

'Otherness / The Other In phenomenology, the terms the Other and the Constitutive Other identify the other human being, in his and her differences from the Self, as being a cumulative, constituting factor in the self-image of a person; as acknowledgement of being real; hence, the Other is dissimilar to and the opposite of the Self, of Us, and of the Same. The Constitutive Other is the relation between the personality (essential nature) and the person (body) of a human being; the relation of essential and superficial characteristics of personal identity that corresponds to the relationship between opposite, but correlative, characteristics of the Self, because the difference is inner-difference, within the Self.' Website: [https://en.wikipedia.org/wiki/Other_\(philosophy\)](https://en.wikipedia.org/wiki/Other_(philosophy)) Access Date 2 October 2020.

P

'Palimpsest In textual studies, a palimpsest is a manuscript page, either from a scroll or a book, from which the text has been scraped or washed off so that the page can be reused for another document. We can look at this description also for landscapes, as they are written over and over again by humans. In colloquial usage, the term palimpsest is also used in architecture, archaeology, and geomorphology to denote an object made or worked upon for one purpose and later reused for another, for example a monumental brass the reverse blank side of which has been re-engraved.' Website <https://en.wikipedia.org/wiki/Palimpsest> Acces date 2 October 2020.

'Phenomenology At the core of Merleau-Ponty's philosophy is a sustained argument for the foundational role perception plays in understanding the world as well as engaging with the world.' *Phénoménologie de la perception* (Paris: Gallimard, 1945)

Plantationocene, a term as a way of drawing attention to the planetary effects of extractive practices, monoculture development, and coercive labor structures that have undergirded modernity and climate change since at least the 1600s, can provide a useful rubric for thinking through human-agent ecological change, especially as these changes unevenly affect different populations and regions. Furthermore, the plantationocene calls attention to the indelible ecological and economic legacies of imperialism including patriarchal and race-based hierarchies, and inequities among diverse peoples based on race, gender, class, and sexual orientation (Haraway, 2014; Tsing, 2015).

Post-humanism A philosophical perspective of how change is enacted in the world. As a conceptualization and historicization of both agency and the “human,” it is different from those conceived through humanism. Whereas a humanist perspective frequently assumes the human is autonomous, conscious, intentional, and exceptional in acts of change, a posthumanist perspective assumes agency is distributed through dynamic forces of which the human participates but does not completely intend or control. Posthumanist philosophy constitutes the human as: (a) physically, chemically, and biologically enmeshed and dependent on the environment; (b) moved to action through interactions that generate affects, habits, and reason; and (c) possessing no attribute that is uniquely human but is instead made up of a larger evolving ecosystem. There is little consensus in posthumanist scholarship about the degree to which a conscious human subject can actively create change, but the human does participate in change. Keeling, D., & Lehman, M. (2018, April 26). Posthumanism. Oxford Research Encyclopedia of Communication. Retrieved 16 Sep. 2020, from <https://oxfordre.com/communication/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-627>

Pristine The pristine was extended to describe the notion of an unspoiled, uncorrupted, or unpolluted state. And what is unspoiled or uncontaminated may connote the freshness and cleanness of something that has just been made, which explains how pristine has also come to mean “fresh and clean.” Found in Merriam-Webster Dictionary. <https://www.merriam-webster.com/dictionary/pristine>. Accessed 30 Sep. 2020.

Psychogeography Literary: geological mapping with graphics with inquiry through the psyche.

R

Rambunctious Garden Emma Marris explains that instead of preserving nature in its pristine, pre-human state, which we now need to find a way for humans and nature to have a fuller relationship. Marris’s proposal is to create the ‘rambunctious garden,’ a hybrid of wilderness and human management. She offers different approaches for organizing those gardens. She particularly wants to encourage us to bring our children into contact with these new types of nature, to access it and play with it (Marris, 2013).

Reflective practitioner Donald Schön’s term for makers that contemplate their work. Can a thinker that makes projects in order to contemplate his or her thoughts then be called a practicing reflectionist?

Response-ability The capacity to be receptive to inherent qualities of a place and react with manners, with sensibility to what is other than us

Reterritorialization / Deterritorialization Deleuze and Guattari’s *Capitalism and Schizophrenia* (1972–1980). As I interpreted it, the terms mean the manner in which place is reformed to constitute power or abandoned. Without thinking about or being mindful to the other, which in this case it that what is transformed / abandoned to constitute power places become scarred in their meaning, since it degrades them to a container of power, instead of a layout that hosts a multitude of ever-

changing complexities.

Rewild restore (an area of land) to its natural uncultivated state (used especially with reference to the reintroduction of species of wild animal that have been driven out or exterminated) (New Oxford American Thesaurus, 2020)

Rewilding Europe 'Rewilding is a progressive approach to conservation. It's about letting nature take care of itself, enabling natural processes to shape land and sea, repair damaged ecosystems and restore degraded landscapes. Through rewilding, wildlife's natural rhythms create wilder, more biodiverse habitats. European wildlife species have strongly declined, even in our wildest areas. Some of them have even gone extinct, while they play a critically important ecological role. Rewilding works to restore lost species guilds by giving them space to thrive, by population enhancement, and by reintroducing key native species.' Website: <https://rewildingeurope.com/what-is-rewilding/> requested 20 September 2020.

S

Scattered 'Occurring or found at intervals or various locations rather than all together' (New Oxford American Thesaurus, 2020) In this thesis used as a symbol to organize data into a chapter. In Chapter 4, different concepts were collected.

Situationist (SI) 'The situationists waged war on what their dominant figure, Guy Debord (1931–1994), termed the "society of the spectacle," a society where individuals were passive consumers of art, leisure, education, and politics and were separated from the product of their labor. The spectacle was "diffuse" in the case of Western liberal democracy and "concentrated" in the authoritarian communism of the East. Debord and his comrades aimed to construct a "situation," defined as "a moment of life concretely and deliberately constructed by the collective organization of a unitary ambience and a game of events" (p. 13). The "situation" was a moment of intensity that broke with the drudgery and illusory pleasure of everyday life, a moment when the spectator became a subject of history and created what another situationist theorist, Raoul Vaneigem (b. 1934), called the "poetry of acts" rather than the "poetry of words." "Situationism".' Retrieved August 13, 2020 from Encyclopedia.com: <https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/situationism>

Soma A drug in Aldous Huxley's 1932 novel *Brave New World*, where a society is portrayed that keeps its citizens peaceful, which includes their constant consumption of a soothing, happiness-producing drug.

Speculative realism 'A movement in contemporary Continental-inspired philosophy (also known as post-Continental philosophy) that defines itself loosely in its stance of metaphysical realism against the dominant forms of post-Kantian philosophy (or what it terms "correlationism") such as Graham Harman and Timothy Morton' (Morton, 2017; Graham, 2018).

'Stalker' is a 1979 Soviet science fiction art drama film directed by Andrei Tarkovsky with a screenplay written by Boris and Arkady Strugatsky, loosely based on their 1972 novel *Roadside Picnic*. The film combines elements of science fiction with dramatic philosophical and psychological themes. The film tells the story of an expedition led by a figure known as the "Stalker" (Alexander Kaidanovsky), who takes his two clients—a melancholic writer (Anatoly Solonitsyn) seeking inspiration, and a professor (Nikolai Grinko) seeking scientific discovery—to a mysterious restricted site known simply as the "Zone", where there supposedly exists a room which grants a person's innermost desires. The trio travel through unnerving areas filled with the debris of modern society while engaging in many arguments.' Website [https://en.wikipedia.org/wiki/Stalker_\(1979_film\)](https://en.wikipedia.org/wiki/Stalker_(1979_film)) Access Date on 2 October 2020.

Stewardship ‘an ethic that embodies the responsible planning and management of resources. The concepts of stewardship can be applied to the environment and nature, economics, health, property, information, theology, cultural resources etc. Stewardship was originally made up of the tasks of a domestic steward, from *stīg* (house, hall) and *weard*, (ward, guard, guardian, keeper). Stewardship in the beginning referred to the household servant’s duties for bringing food and drink to the castle’s dining hall. Stewardship responsibilities were eventually expanded to include the domestic, service and management needs of the entire household. Commercial stewardship tends to the domestic and service requirements of passengers on ships, trains, airplanes or guests in restaurants. This concept of stewardship continues to be referenced within these specific categories. Stewardship is generally recognized as the acceptance or assignment of responsibility to shepherd and safeguard the valuables of others.’ Website: <https://en.wikipedia.org/wiki/Stewardship> Access Date 1 October 2020.

Sympoiesis *Sympoiesis* is Donna Haraway’s replacement of the term *autopoiesis* coined by the Chilean biologists Maturana and Varela. *Auto* meaning ‘self’ and in Haraway’s argument nothing makes itself: everything is a dance together. Maturana and Varela do not state this, however Haraway points out that nothing is individual but shaped simultaneously by its context. Chapter 3 of *Staying with the Trouble: Making Kin in the Chthulucene* - Haraway (2016).

T

Tabula Rasa ‘*Tabula rasa*, (Latin: “scraped tablet”—i.e., “clean slate”) in epistemology (theory of knowledge) and psychology, a supposed condition that empiricists have attributed to the human mind before ideas have been imprinted on it by the reaction of the senses to the external world of objects.’ (Encyclopædia Britannica, 2020; www.britannica.com/topic/tabula-rasa Access Date: September 16, 2020).

Tamagotchi The Tamagotchi is a handheld digital pet that was created in Japan by Akihiro Yokoi of WiZ and Aki Maita of Bandai (Wikipedia, 2020).

Technocracy ‘Government by technicians who are guided solely by the imperatives of their technology. The concept developed in the United States early in the 20th century as an expression of the Progressive movement and became a subject of considerable public interest in the 1930s during the Great Depression. The origins of the technocracy movement may be traced to Frederick W. Taylor’s introduction of the concept of scientific management. Writers such as Henry L. Gannt, Thorstein Veblen, and Howard Scott suggested that businessmen were incapable of reforming their industries in the public interest and that control of industry should thus be given to engineers.’ Website: <https://www.britannica.com/topic/technocracy> Retrieved September 30, 2020).

Tentacular thinking Mention of Donna Haraway’s term ‘tentacular thinking’: ‘The tentacular ones tangle me in sf. Their many appendages make string figures; they entwine me in the poiesis—the making—of speculative fabulation, science fiction, science fact, speculative feminism, *soin de ficelle*, so far. The tentacular ones make attachments and detachments; they take cuts and knots; they make a difference; they weave paths and consequences but not determinisms; they are both open and knotted in some ways and not others’ (Haraway, 2015, p. 31).

Terrain vague *Terrain vague*. ‘The relationship between the absence of use, of activity, and the sense of freedom, of expectancy, ...void then as absence, and yet also as promise, as encounter, as the space of the possible’ (Sola-Morales, 1995). See more on page 79.

Terrapolis Haraway’s (2016) term for the populated earth.

The in-between I see the in-between as a appreciation for nuances and a sensitivity for the fact not all of reality can be caught in words or concepts.

Third generation city In a conversation with the architect Marco Casagrande (Helsinki, 2019) we had contemplated about the role of architecture in redefining new socio-ecological balances for the third generation city. Marco called this the “third generation city” referring to the generations living amongst post-industrial ruins.

Third Landscape designates the sum of the space left over by man to landscape evolution - to nature alone. Included in this category are left behind (délaissé) urban or rural sites, transitional spaces, neglected land (friches), swamps, moors, peat bogs, but also roadsides, shores, railroad embankments, etc. To these unattended areas can be added space set aside, reserves in themselves: inaccessible places, mountain summits, non-cultivable areas, deserts; institutional reserves: national parks, regional parks, nature reserves. Text found at website: <http://www.gillesclement.com/cat-tierspaysage-tit-le-Tiers-Paysage> retrieved at 30 September 2020.

Thrownness (German: Geworfenheit) is the concept introduced by German philosopher Martin Heidegger (1889–1976) to describe humans’ individual existences as ‘being thrown’ (geworfen) into the world (Heidegger, 1927).

Time textures The tangible material effects of weathering and entropy in material, that affect a sense of time. In natural vegetation, this is readable through succession and seasonal change. The loosening paint on a wooden door, fading letters on a wall, reminders of old traditions or simply rust and rot. Simultaneously, we can image the place as new: it is the understanding of an ongoing palimpsest. This evokes a feeling of temporality, and can connect us to a spirit of the place in a larger context such as the meaning of the building and its relationship with phenomena on a wider scale. Decay also impacts the overall morphology and flows of the architecture, resulting in a labyrinth brought to life by time.

Transcendental realism ‘Transcendental realism is a philosophy of science that was initially developed as an argument against epistemic realism of positivism and hermeneutics. The position is based on Bhaskar’s transcendental arguments for certain ontological and epistemological positions based on what reality must be like in order for scientific knowledge to be possible’ (Sayer, 1999; Wikipedia, 2020).

U

Unbreakable Another quality of the abandoned place is its unbreakable character, inflicting a new attitude towards material as well as social rules. In an abandoned place, we can climb trees, play loud music, crush stones, draw on the walls, climb on roofs, wander through the forest. The lack of management also allows for natural succession that, on its own, contributes to the sense of wilderness. The unbreakable, in the sense that the place is already ‘broken,’ evokes stout-heartedness: nothing is too fragile to touch, nor will you be prevented from straying off the path. This is a sense of freedom, a place of possibility (I. de Solà-Morales, 1995, in: Tyner, 2014).

‘Uncanny, the psychological experience of something as strangely familiar, rather than simply mysterious. It may describe incidents where a familiar thing or event is encountered in an unsettling, eerie, or taboo context. Sigmund Freud elaborated on in his 1919 essay *Das Unheimliche*, which explores the eeriness of dolls and waxworks. For Freud, the uncanny locates the strangeness in the ordinary.’ Text found at website: <https://en.wikipedia.org/wiki/Uncanny>. Requested September 2020.

Unfamiliar familiar An experience that partly consists of known patterns, but innovation through decay leaves room for the unexpected. The displacement of everyday objects in completely non-rational ways: rare vegetation that grows with its own rules alongside familiar plants, the common sound of trains somewhere nearby contrasting with strange crunches under our feet, colorful traces

of rebellious human activities, the touch of pulverized concrete, splintered wood and the smell of oil, a weathered child's toy – these all contribute to 'material psychosis, a sense of other in the shape of the known: an 'uncanny' zombie landscape

Unlearning To become aware of the limitations / biases of the learned to be able to learn it in a better or more conscious way.

Urge-agency An agency that works with the designer/intervener's intrinsic motivations / urges while acting with urgency: now and applicable Also: an agency aware of human urges to overrule.

V

'Viridian Design Movement was an aesthetic movement focused on concepts from bright green environmentalism. The name was chosen to refer to a shade of green that does not quite look natural, indicating that the movement was about innovative design and technology, in contrast with the "leaf green" of traditional environmentalism. The movement tied together environmental design, techno-progressivism, and global citizenship. It was founded in 1998 by Bruce Sterling, a postcyberpunk science fiction author. Sterling always remained the central figure in the movement, with Alex Steffen perhaps the next best-known. Steffen, Jamais Cascio, and Jon Lebkowsky, along with some other frequent contributors to Sterling's Viridian notes, formed the Worldchanging blog. Sterling wrote the introduction to Worldchanging's book (Worldchanging: A Users Guide for the 21st Century),[5] which (according to Ross Robertson) is considered the definitive volume on bright green thinking.[6] Sterling formally closed the Viridian movement in 2008, saying there was no need to continue its work now that bright green environmentalism had emerged.' Websites: https://en.wikipedia.org/wiki/Viridian_design_movement & <http://www.viridiandesign.org/manifesto.html> Access date 30 September 2020.

Virtual Plane 'The virtual is opposed not to the real but to the actual. The virtual is fully real in so far as it is virtual'. (Deleuze, 1994) The virtual plane is the totality of differences there are: an assemblage of possible actuals that indicate as well the multiplicity of possible futures.

W

Wabi-sabi 'In traditional Japanese aesthetics, wabi-sabi is a world view centered on the acceptance of transience and imperfection. The aesthetic is sometimes described as one of beauty that is "imperfect, impermanent, and incomplete".[3] It is a concept derived from the Buddhist teaching of the three marks of existence (sanbōin), specifically impermanence (mujō), suffering (ku) and emptiness or absence of self-nature (kū). Characteristics of the wabi-sabi aesthetic include asymmetry, roughness, simplicity, economy, austerity, modesty, intimacy, and appreciation of the ingenuous integrity of natural objects and processes.' Website: <https://en.wikipedia.org/wiki/Wabi-sabi> Requested 30 September 2020.

Weak Anthropocentrism 'Nature can help to define human preferences and therefore should be used responsibly. Weak anthropocentrism acknowledges that there is a close relationship between humans and other species, and that human experiences and nature have value in that they provide the basis and inspiration for value formation. The environmental ethic produced by weak anthropocentrism has two levels: distribution and allocation. Distributive fairness is takes into account intragenerational justice and says that we shouldn't harm others unjustifiably. Allocation considers intergenerational justice and says that we should maintain a steady flow of resources for us and future generations. We don't have an obligation to the future generations, per se, but rather to the integrity of the environment so that it can help sustain them. The resources we use today don't necessarily have to be the same as the one's we leave to the people of the future—we just need to make sure we leave them something. When we consider changing our population

policies and resource policies, we must remember that the “people of the future” will not have a valid reason for being frustrated with us and our exploitation of resources. If we had changed our policies, the same people complaining most likely wouldn’t exist. To this end, as long as we make sure we are using and/or replacing our resources responsibly, we should be in good shape.’ Text found at website: <https://laurensenvironmentalphilosophy.wordpress.com/2012/12/19/nortons-weak-anthropocentrism-not-a-weak-theory/> requested 30 September 2020.

Wildscapes Wildscapes. Environments with qualities of spontaneous socio-ecological events.

Worlding ‘An active, ontological process; it is not simply a result of our existence in or passive encounter with particular environments, circumstances events or places. Worlding is informed by our turning of attention to a certain experience, place or encounter and our active engagement with the materiality and context in which events and interactions occur. It is above all an embodied and enacted process – a way of being in the world - consisting of an individual’s whole-person act of attending to the world. Wording is worlding, and what we need to do is word the world better ‘ (Foley, 2017). Website: <https://newmaterialism.eu/almanac/w/worlding.html> Access data 30 September 2020.

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Oskam, P.I. (2016) New Bridge Keepers. A set of installations around vacant bridge utility houses, with Stichting Brugwachtershuisjes.

Teaching experience

2021- Minor Creating Resilient Cities, Rotterdam University of Applied Sciences

2020 MSc Elective Landscape Architecture 'Urban Ecology', TU Delft

2018- BSc Design Project 1 'House in the landscape'

2018- BSc Design Project 3 'Urbanism and landscape architecture'

2018- BSc Research About, For and Through Design

1 INTRODUCTION

exploratory research

1.1 APPROACHING COMPLEX REALITY

In times of 'fake news', processes and changes that are difficult to perceive, work and society that is driven by the accumulation of power, money and individual profit, it becomes clear how misleading it can be to follow others in the formation of values: there may be hidden political and economic agendas.

It is also possible that new possibilities lie hidden as a result of goal-oriented thinking—sometimes consciously, often unconsciously. For this reason, it may be less biased to stay “in the middle.” This is not out of mistrust of experts, but to contribute to the challenges we find in uncharted territories brought about by climate change and rapid technological developments. It was decided not to focus at the beginning of the research, but to use the PhD journey as a way to find direction. It was not the intention to force this research into a topic. By studying a wide number of paths the dead-end paths could also be visited. Due to the financial support of FCT, the author's motives were independent, not influenced by a political research agenda. This condition was taken to its advantage. Instead, the search was about meaning, relevance and intuition. This allowed the author to work with time, freedom of movement and welcoming institutions, but without eye for the end result. The vision is that, with time, honesty and openness wins over forced truth.

Reality may be less perfect than the idea. With this way of reasoning, it becomes interesting to approach reality in an ever different way. After all, it is no longer in the researcher's interest to seek confirmation of signals to the intended end goal. Or look for information that will help answer a yes or no question. Different perspectives ensure that doubt and making mistakes are unavoidable aspects and that they constantly shift the path. Those new paths are welcomed here. Immersing in that overload of information is described in the open chapter or as is called in this thesis, mosaic, called 'submerged'.

1.2 OPEN SYSTEMS

Aren't models of simplification, arrangement and delineation the best that can be done to better understand the world around us? We see that research models and concepts try to approach the world with correctness and effectiveness. They are tools for developing knowledge and reasoning. Mainstream research respects agreed methods and validation of an agreed truth. This is usually based on the 'wanderer above the sea of fog', where by applying the scientific method, researchers meet each other through scientific practice ('the mountain walk') on the 'mountain top', the objective truth. But if the path up the mountain is pre-determined, to what extent is reality approached? And to what extent has the research been open to new paths and other types of truths?

The realization that human existence plays a major role in disastrous changes on a global scale (the Anthropocene) results in greater recognition of complexity and the need to approach it. Nietzsche embodies the dialectic of perfectionism and hedonism with Zeus' sons Apollo and Dionysus, derived from Ancient Greek mythology (Nietzsche, 1883). According to Nietzsche, Apollo stands for harmony, progress, clarity, logic and the principle of the individual, while Dionysus stands for disorder, intoxication, emotion, ecstasy and unity. In the Anthropocene, the perfectionist Apollo is forced to become a wandering Dionysus: situations are so complex that even with pure logic the journey to truth takes on a hedonistic nature. Added to this is the question of responsibility and control as a species on Earth. In more and more situations it is no longer possible to keep blinders on: multiple and changing factors have to be taken into account when dealing with unpredictable processes on a global scale, such as climate change, diseases and pollution. Taking those multiple factors into account requires a deep understanding of complexity and unpredictability. At the same time this recognition holds that the processes can't be controlled.

This understanding comes to the point that human capacity for understanding the world and non-humans is limited. Man cannot exercise control outside this capacity. The question of whether truths correspond with or refer to complex reality is not considered in daily 'Apollinian' scientific practice. Knowledge in mainstream science is not so much judged on absolute truth, but on empirical (scientific-contextual) correctness and effectiveness. A distinction can be made here between formal (transcending) knowledge as contained in mathematics or in logic and empirical (practical) scientific knowledge. Knowledge of reality is not regarded as absolute, but as probable. Reality is reduced to a level where it is instrumental and manipulable.

In research where the hypothesis guides the research, the methods and observations lead the answer to a 'yes' or 'no'. But during exploratory research, there is the chance to come across new unexpected findings that give new insights/evidence to go down new paths. In this way we work in an open system and we go beyond yes and no, beyond control. Through Dionysos's meandering path we encircle something "emerging," whose portents we may have once seen but whose form was unknown to us - something new to our understanding. Open systems are easy to recognize: they have a distinct character. They can be recognized by the fact that they cannot be copied, are unique to a place, intertwined with a non-linear development (Sennett, 1996). In an open system, simple rules can produce complex results. With openness, a known and determined beginning can yield unforeseen results (chaos theory). In a complex system, a small event can cause a big event because the relationships are linked in an unpredictable way (tipping point). Because they are not controlled but still organise, complex systems can self-organize/create 'autopoiesis' (Sennett, 1996). Because the word 'self' assumes an independent system with a boundary, Haraway supplements this to organize/create together 'compoiesis' (Haraway, 2013).

1.3 CLOSED SYSTEMS

Closed systems, on the other hand, can be recognized by homogeneity and repeatability. They can be calculated in advance. The system sees everything that does not give harmony as noise. Noise is distracting for the shaping of the probable world and brings ambiguity to statistics from stakeholders, governments and the calculation of potency and information. Ability to repeatability is meant to be effective and to grow. So how do we deal with the complexity of meanings associated with philosophical notions? For example, the mosaic 'scattered' looked at different philosophical concepts about empty or 'wild' space. The idea of "terrain vague" (de Solà-Morales, 1995) has the meaning of being free from program, a layer outside everyday interpretation. The meaning is originally so subjectively endorsed that it is difficult to quantify. The notions are linked to a philosophy. We can describe what the pragmatic usefulness of such a concept can be, but this reduces the notion of the creator and the thinking that has developed it into an instrument. The notions can be included in an open system, because they do not have to be valued directly. The search for the usefulness and purpose of such a notion already provides guidance and assessment – and that was precisely not the attitude taken in this thesis. An argument in this thesis is that one should look less at efficiency in order to be open to notions about caring for the environment.

If Apollo's tools had been used, this investigation would have ended up in a different place anyway. For example, based on the sources, it would have turned out that the empty space is undesirable for the human and non-human stakeholders and that it needs to be transformed for an optimal use of the space. The notion could also be used to normalize a new usage. Then the notion would have been applied when it was useful for certain agendas such as politics, monetization of an area or nature conservation. The attitude adopted in this research journey was to approach the world autonomously, not to let it fall into the hands of political considerations. Because this way of reasoning is used, arguments to convince politicians to fund or apply these ways may be missing. But whether the outcome of the search could also be instrumental for politics was not the goal. Although the world on a conceptual level seems to repeat itself (a modernist thought), no petal is the same as the previous one: the world is in constant change (Deleuze, 1968).

In 'knocking at the door of socio-ecological crisis in the Anthropocene' it is considered a need to not be obliged to have measurable results. That's why the challenge of doing an open research is undergone.

1.4 LEARNING FROM THE OPENNESS OF 'ABANDONED PLACES'

The urgency for an open investigation was fueled during the first visits to a number of abandoned areas in Portugal. Especially in Porto, Coimbra, Valongo and the villages around Serra da Estrela. From Portuguese literature research it became clear that the exodus of these areas contributed to a negative image of the inhabitants who remained in these villages. The decay of buildings and landscapes made them experience sadness and hopelessness (Loures & Panagopoulos, 2007). In addition, the overgrowth and drying out of small agricultural land contributes to the spreading of (sometimes ignited) forest fires (Parente & Pereira, 2016). The naturalization of vegetation contributes to an unsafe feeling and is generally experienced as less aesthetically pleasing. The overgrowth of shrubs pushes other species away, causing the species richness to decrease (Anderson & Minor, 2017). The response of municipalities is to hide, demolish or rebuild these places. These municipalities prefer to focus on making growth probable. The reality is that in many places in Europe areas are still emptying and more than often, nothing is happening (Wolff, 2010) After some literature research, this appears to be the case in large parts of the world: despite the growing world population (an estimated 12 billion in 2050) a large number of spaces is abandoned due to rapid programmatic changes related to the -industrialization, population aging, migration to the city, political and economic shifts.

The symptoms manifest themselves in a variety of spatial forms: abandoned villages and industrial buildings, neglected agricultural land, polluted and exhausted mines, WWII bunkers, etc. With the current capitalist, aggressive way of dealing with space, the list only gets bigger.

Should researchers and designers jump right now to see how the solution can be optimized, or how the problem can be mitigated? Or can researchers approach the situation in a different way without immediately trying to manipulate the situation?

A dive into the literature brings new insights about latent value in these abandoned places. Dilapidated buildings have historical value that hints at the past, but their lack of control can also inspire new imaginations, such as the strange way they collapsed, effects of the weather or the ingenuity of new plant species. Current publications provide extensive information on how abandoned areas can provide space for informal play (Edensor, 2005) creativity, unique compositions of ecology, (Kowarik, 2013; Sukopp, Blume, & Kunick, 1979) a relationship or 'mourning process' with the transience (DeSilvey, 2017), a critical look at everyday life (Gandy, 2013; Jorgensen & Keenan, 2012), climatic advantages (Nassauer, 2007) and perhaps the refraction between the human-nature dichotomy (Marris, 2013). Above all, the openness of desertions between areas offers a different view of a reality: through their honesty they address relevant problems on other scales and offer a critique of the control of the built environment (Debord, 1952; Foucault, 1975; Simmel, 1903).

Abandoned places are also open systems. After all, on a large scale, the landscape is continuously in decline and change, while life is dependent on its climate. The space is not only determined by a function devised by people or their optimal image of it. Without the maintenance of man, they are open about their complexity and thereby offer a critique of the everyday construct of life. The material that decays gives an indication of time and change. Desiccation shows that we are dependent on the landscape and that the processing of the living environment requires attention and respect.

Overgrowing vegetation offers a glimpse into the death, phasing and adaptability of biology. The existing, self-developed 'emerging' of a place goes without forcing and is therefore also low-maintenance and sustainable. The hodgepodge is a representation of 'a more real' nature-culture that has been conditioned by the existence of man.

"There is an implicit mistrust of 'letting things be' or thinking creatively about how spontaneous processes of ecological change enrich the city in unexpected ways." (Gandy, 2013, p. 263). A reality where decay, death and lack of control is present is confrontational and evokes discomfort in people. The landscape is like a Frankenstein monster that was considered a monster due to its banishment. But as Latour says: 'love your monsters': don't hide the unwanted consequences of creations and finds, and be a 'cautious prometheus' (Latour, 2008) about the consequences of technological developments. Hiding indescribable, abandoned places symbolizes the human urge for clarity and control (Latour, 2011). So a contradiction is, although these spots seem empty, they can be rich in their multiplicity. A modernist building is then relatively 'empty' from that perspective.

Abandoned places are used as a way to contemplate the complexity of open systems. While moving through those places, the above authors were companions. Instead of the designer bringing change or control, what can be learned from abandoned places in a long period of time using a myriad of methods known to the field of designers?

1.5 A PLATEAU OF TRUTHS

Seeing that reality consists of complex truths begins with the recognition of objective, subjective and normative truths. With the realization that the various truths are not all accessible to everyone at all, depend on network and context, describing truths becomes increasingly complicated. That it does not only have to lie in people and their differences, but can also be seen from non-human beings, their inter-subjectivity and even acting objects adds to this. Not to forget that breaking with modernist dichotomies requires nuanced descriptions of the gray area between black and white. Now that we see that "truth" is a spectrum of truths, reality is actually incomprehensible, and it is insufficient to capture it in concepts, does it make sense to strive for this?

No, I learn during this trip, that's impossible. Recognizing and dealing with a complex truth is not necessarily about describing or forcing it, let alone finding a solution to it. The study is not about the individual pieces, but the image that forms the mosaic. Or as Einstein wrote in a letter to R.A. Thornton mentioned: not of a thousand trees, but the forest: "(...) So many people today, and even professional scientists, seem to me like someone who has seen thousands of trees but has never seen a forest. (...) independence created by philosophical insights is, in my opinion, the mark of distinction between a mere artisan or specialist and a real seeker after truth." (Einstein, 1944).

As a result, it is now more difficult to follow a previously described compass or method. Nietzsche calls the path to truth "climbing the mountain" the subjective journey of the researcher. He is convinced that one should not strive to be at the top of the mountain - objective truth - because it will be lonely there. Knowledge and truth are intertwined with the journey to that truth. Knowledge is not isolated, but always in relation to other knowledge.

Those who are committed to the idea of normative truth say that rational and logical thinking leads to an overall truth, that the various 'ascents' eventually meet at the top (Parfit, 2011). Here we must not forget to always tread new paths and to involve them in this. According to Latour, not only the everyday, but also scientific knowledge is a social construct (social constructivism). Things and people are inextricably linked and transform each other (Latour, 2013).

So objective truth can be measured, but can be cold and hollow, meaningless. Subjective truth is strongly linked to context, but can be a one-sided and narrow perspective. Normative truth comes from what is considered generally true in discussion, but has the potential to result from networked beliefs. The following has been assumed as an experiment in this thesis: the top of the mountain, that unambiguous absolute truth, is untraceable. It is now a misty plateau rather than a clear view from the highest point, as the painting would lead the wanderer above the sea of fog to believe. This is not a static, barren plateau where thinkers meet, but a dynamically and changing ecosystem. The more knowledge there is, the more knowledge there is of how little knowledge there really is. That assemblage of truths, if we deal honestly with it, only makes the top of the mountain more incomprehensible.

The truths are welcome on the plateau, a stage where the intertwining of these perspectives can exist - and moreover is intertwined with these perspectives. That only real reality is a household or 'oikos' of truths. The idea that a self-organizing construction of truths shapes reality is what I call, for now, 'ecological constructivism'. It is a proliferation of knowledge-self-organizing social constructivism. In a world where the depth and complexity of every situation is recognized, a task would be facilitating the ecosystem of truths rather than deterministically valuing or ranking truths.

After all, that appreciation also depends on a perspective and creates the illusion that control is possible. Truths interact, but do not always convince each other. Truths are not always opposites. The interaction can result in the enrichment of a truth - but at least truths don't have to be hidden or forced. The 'staying' in this layer of multiplicity is, as I interpret it, what Haraway calls 'Staying with the trouble'. 'Trouble' in this sense is not conflict or contradiction between problems or parties, but recognizing the complexity of situations and the adjustment or 'attunement' of these in relation to each other. It also shifts the anchoring of truths from man to all living beings, 'critters' and multi-species intersubjectivity (Haraway, 2016). So there is no clear 'research gap' to fill, but rather a goal of embracing what we cannot encompass by looking around it. Can man think for a non-human? The question is not only how can we approach that, but also whether we can approach that?

1.6 EXPLORATORY RESEARCH

How do you forge new paths? By exploring. The focus of exploratory research is to gain understanding and knowledge for later investigations. The study determines the direction for further research, and techniques or applications can be developed later.

Benefits of exploratory research:

- it helps to determine priorities and values
- it explores questions about the meaning of “why” about “what” and “how”
- with the ultimate goal of insight and knowledge, other perspectives are more easily included
- without self-interest in achieving efficiency, it helps to change direction
- it is not looking for measurable returns, but instead getting an immersive understanding of the context.

Disadvantages of using exploratory research:

- findings of exploratory research indicate direction, not general truth
- the data collected can be diverse and incoherent
- the results of are preliminary and difficult replicate in other contexts, due to the fact that the results are shaped and driven by specific contexts
- the results are less useful, for example, to convince governments with quantifiable results

WHY CHOOSE FOR EXPLORATORY RESEARCH

As read above, research from an open system is unique and characteristic in its form. The shortcoming for usefulness and effectiveness is that it is provisional and uniquely structured and therefore difficult to repeat. As a result, this way of working is less result-oriented. However, the author is convinced that in the complex, urgent reality of the Anthropocene, broadening exploratory research is all the more important to form a vision. What kind of agency would a designer/researcher hire in complexity? Which values, goals and themes can be formulated? And how can someone else apply this method? In a complex environment it is all the more important to work with openness of exploratory research and apply the following advantages:

- to reformulate assignments
- find relevant new research fields
- to create new paths and connections between research fields
- highlight underexposed value
- facilitating complexity by allowing types of realities to coexist
- finding direction for a vision with a complex background
- contributing to ways in which new visions and fields of research can be developed
- point out why it is important to research and build less purposefully
- to include ‘noise’ in the research
- never to consider results as absolute

1.7 THE STRUCTURE OF THIS THESIS

When leafing through the work, the reader will notice that the texts and images do not always seem to follow each other. This thesis is a mosaic of loose truths resulting from texts, walks, conversations, photos, drawings and interventions. These have been collected, placed next to each other and regrouped. This mosaic is what can be read in the mosaics in the middle part of this thesis. An outcome has been deciphered from each grouping that helps to explore and change direction. The mosaics do not have to be read linearly, but form themes that are assembled by means of the fold-out diagram (see: complex mosaic diagram). The strange structure of this thesis is deliberately open and non-linear, as this represents the nature of the research. Due to the broad framework, a lot of information has been processed that initially does not seem directly relevant. This 'noise' has been retained in this thesis. To give an impression:

a lot has been learned under the guise of 'living' research. An mosaic of information: what philosophers write about nature, landscape and ecology, how mushrooms are grown, how sensors work, where there is shrinkage and vacancy in Europe, how artists, governments and architects look at decay, which landscape projects apply wild vegetation and how the designs re-interpret brownfields. City trips have been made to all kinds of locations throughout Europe where each time someone is interviewed, how Portuguese is spoken (the university was completely Portuguese). Photos have been taken of vacant areas, diagrams have been made that map out the relationships between the data. Science fiction has been read to imagine scenarios and conferences have been attended on tourism, robots, dance and the Anthropocene. The author has written, but mainly drawn concept images and spoken with residents and researchers from the humanities and engineering. Scientific articles have been read about entropy, bats to de-growth.

Design projects have been carried out with students of architecture on the greening and densification of Rotterdam. A visit has been made to residents and authorities of empty villages in Northern Portugal, Southern Italy. Gardening was done in ecovillages. The author has constantly created design ideas that could provide a solution to the problems - but also let them go. The author has made interventions and distributed them throughout the city. With the help of children, mycelium has been planted in facade gardens. With a clay printer they experimented with different shapes. Some of the sites have been visited regularly, others fleetingly - never systematically. Collecting data was about everything and about nothing.

The search is like the 'Lévy-walk', a mandelbrot pattern found in search behavior in foxes, spiders, sharks, and human hunter-gatherers when in unfamiliar territory. This pattern is not linear, but an intuitive alternation of jumps and clusters. The collection of data is interwoven with the personal life of the researcher. The search for meaning and relevance has been 'lived'. An inefficient way to approach an otherwise non-existent research question. A less conventional way of organizing data, without the magnetism of a research gap, which helps organize this data. A journey of information gathering driven by curiosity, meaning and intended relevance. The only thing that could be done was to live it. As a result, the work is inextricably linked to the author's privileges and limits. I am aware that I am a white man from a rich western country.

The impossibility of never being completely neutral complicates the visits from the start. It quickly became clear how rich the amount of perspectives is. The conclusions of these aspects are so diverse that the results of the individual studies do not mean much in themselves. It's a jumble of relationships that provide a networked background for finding a path. Despite these limitations, this method was chosen. The demarcation worked the

other way around: the limits of the research were explored by means of trial and error. That demarcation is determined by what the author, in combination with the finds along the way, found relevant.

1.8 A MOSAIC OF DATA

It may be that the mosaics raise questions rather than answers. That's partly how it is meant: the work should facilitate discussion and point of view for the reader, and question the relevance of the work. With that it is an invitation to approach complexity. Precisely because the author is aware of this subjectivity, he has not started to know exactly how it is, or to say that something is 'true' or 'good' for or from a certain perspective. It is also possible that the topics discussed in the mosaic sometimes remain superficial, contradictory and confusing. In order to visit more perspectives in breadth, it was decided to jump in and take samples instead of delving into one or a number of topics. A position was therefore not adopted in the beginning - the research has remained 'in the middle' as much as possible.

The more knowledge is taken from different perspectives, the more difficult it becomes to assume one position. Because if anything is possible, without a clear political agenda or motive, what is relevant to do? Which direction should one take then? When should we start demarcating? At the very beginning, or at the end? How much should be noted? And what, all or nothing? Here it was decided to document everything and take it with you. Sometimes objective truths are not subjectively observable, or vice versa. This may partly be because it is not visible to the naked eye because of its scale in space and time: too small (a microbe, millisecond) or too large (a landscape, millennium). In addition, too much emotion or a lack of it plays a role: it can be due to a lack of imagination, empathy or tools and background knowledge to perceive layers. Moreover, it must be reconsidered time and again: complex truth does not stand still, it is subject to continuously changing, often

invisible processes. Approaching complex truth forces the seeker to be comfortable never being in control or oversight.

The amount of data has been collected, merged, deciphered and described by means of different perspectives. Corbin and Strauss outline their approach to open coding, axial coding and selective coding in their 1990 paper, "Grounded theory research: Procedures, canons, and evaluative criteria." This post is our summary and interpretation of their paper. In a nutshell, the first step of grounded theory is open coding, when collected data is broken up into discrete parts, axial coding is when connections between codes have been drawn, and selective coding is when categories can be identified to connect all the codes and capture the essence of the research.

All data has been collected and grouped into different mosaics that can be seen from page 34 to 186. At the end of each mosaic the findings are highlighted.

To map this exploration, we call on ingenuity and creativity. To make one's way through the darkness, one can use other means: touch, smell, hearing, imagination and empathy. But also steps in the dark can be taken: courage and motivation are a driving force in this. This continuing to reinvent direction, as it were like a constantly calibrating compass, is essential in a world of complex truth.

Grounded theory coding process

1 wander/gather (open)

- wander
- search / read literature
- photograph
- conversations with residents
- talks at conferences
- locations / idea designs
- writing texts
- passive on location

2 merge/group (axial)

- visual notes / diagrams
- theoretical sensitivity / sampling
- constant comparative analysis
- design ideas / design motives

3 decipher/extract (selective)

- build-out expandable diagram
- arrangement texts / layout
- decipherment of relations
- filter the core topics
- identifying the essence

4 describe (thesis composition)

- description of new knowledge
- articulate through presentations
- generate grounded theory / 'the red wire'

1.9 GROUNDED THEORY

The debate about the character of design is long and ongoing: this thesis applies different methods of design research in a challenging context and aims to bring new findings to the table by mixing methods. One assumption made from the outset is that design research has a valid reason to be process-oriented, non-linear and context driven.

Inductive research aims at creating new knowledge, starting with the voice of the author. The research problem emerges as the story progresses. By observing the world in many different ways, the researcher collects data. This can always be a mixture of methods, as explained further in this chapter. After doing this, patterns will appear or be discovered. In the final stage, a new theory or approach can be identified out of those patterns. We can see this approach as a bottom-up information mindset.

*Grounded theory*² is inductive research. The researcher will step into the field and reflect upon it, trying to keep an open, unbiased mind, trying to shed their assumptions. This will involve a period of doubt and uncertainty. The problem derives from the setting itself, while the data guides towards the creation of a new theory (Glaser & Strauss, 2017; Strauss & Corbin, 1998; Creswell, 2012; Charmaz, 2014).

From the start of this thesis, the framework of grounded theory has allowed for an open perspective and methodology. As grounded

² Developed by socialists Barney Glaser and Anselm Strauss, *Grounded Theory (GT)* is a way of thinking about and conceptualizing data. The Discovery of Grounded Theory (1967) helped to legitimize qualitative research, meaning and a dynamic method / hypothesis. This method showed useful in reaching the richness of complexity and processes and gives serious meaning to symbolism and concepts as way to inquire and analyse data.

theory suggests, the methodology and theory is formed through the lessons learned along the way. In grounded theory, all is data. The sources of this whole study consist of: visual material: pictures, drawings, maps, sketches; textual material: literature, websites, notes; site visits: exploring the sites on foot, alone and with others; Design experiments: material translation of thoughts for reflection: conversations: notes of interviews and discussions

'GT is multivariate. It happens sequentially, subsequently, simultaneously, serendipitously, and scheduled'
(Glaser, 1998)

The focus is on developing a theory grounded in data from the field, but the type of problem does not lie in grounding a theory in the views of participants: instead, it lies in needing to tell stories of individual experiences, needing to describe the essence of a lived phenomenon and providing an in-depth understanding of cases. The unit of analysis is the study of a process, action or interaction involving many individuals. 'Individuals' here can be objects, places, travels, people, ideas and authors. The data has gone through stages of coding, conceptualisation, categorisation and finally, writing theories.

The methodology of this thesis was not determined from the start but was extracted from looking back on the journey. This does not mean methodologies were not studied and applied from the outset, but they were not implemented as key approaches. Instead, intuition, coincidence and the advice of my supervisor have played an important role in finding fitting approaches to the rapidly changing topics, directions and aims. The constant re-interpretation of the context and problems resulted in a dynamic hypothesis that demanded agile adaptation throughout this thesis process. A useful tool to code, conceptualise and categorise was to map the experience into one image.

By adding different understandings, methods and perspectives as corresponding layers, I was able to structure the design-research journey (Annex 3). Because my voice and instinct had initially emerged through this quest, it was a challenge to translate this journey into a map. The mapping of the journey has helped me find parallels with methods I have studied before. By associating those parts with different design research approaches, methodologies fitting to the specific parts were automatically revealed.

1.10 VISUAL NOTING & DECIPHERING

Visual noting is closely related to the wandering that is done. Translations are made between different types of notes. Psychogeographic maps, mind maps, designs and visualizations of theoretical concepts are made. Drawings have served as a basis for this work. A selection of these images has been put together as a large collage (Appendix 1). The images and diagrams are a notion layer of the field visits, lectures, design ideas, descriptions, recorded conversations and theories. Why are these not shown larger, or explained in more detail? They are the proverbial 'trees' of the 'forest'. They only form the medium from which the fold-out diagram at the end of the work is built. The fold-out diagram then again helped organize the mosaic. Through the knowledge from the texts and visual notes, signs could be extracted that determined the results of this work.

The tools of designers and artists are strongly linked to imagination, association and project-based thinking and situatedness. Since there are different layers of knowledge and text is also open to interpretation, concept and imagination can be a way of investigating. It is perhaps less recognized as a language than writing. In addition to non-humans and acting objects, there are also differences in how humans are "wired" and relate to the world. It would be a shame to recognize this only in the world of writing. Visual and design research offers itself as a strategy for approaching

complex problems. As can be found in the literature, it is precisely the jumping between fundamental, basic and applied research that makes research by design a rich way of doing research. Although it suffers from a “methodological fuzziness” (Horváth, 2007), practice and theory are combined in such a way that it contributes to deeper design knowledge (Frankel & Racine, 2010).

As we can find in Frankel & Racine’s (2010) overview of forms of research by design, the literature is divided on Frayling’s suggested meaning of “research by design” (Jonas, 2007: 190). Findeli distinguishes it from research by design by associating ‘through design’ with theory and ‘for design’ with practice (1995: 2). Jonas considers research through design to be the only real research paradigm because it is here that new knowledge is created through an action-reflection approach (2007: 189-192). In this approach, the emphasis is on the research goal of creating design knowledge, not on the project solution (Frankel & Racine, 2010).

1.11 WANDER

How can you lose direction to pick it up again? Like the different senses used in the darkness, data in different forms has contributed to the journey of discovery. A conscious decision was made to integrate impressions outside the textual world in the research. Creating project ideas has been used as a way to describe scenarios and then compare them with other findings. A design is never the ultimate goal, but another way to experiment, find out motivations and make connections.

Wandering offers the opportunity to see the complex truth from multiple perspectives, to relate it in unexpected ways and to gain new insights. Wandering also ensures that problems can be experienced by the wanderer. The wanderer is forced to improvise: he or she works with what is available at that moment on the spot (Braae & Riesto, 2011). To navigate the changing maze, adjustment is more

important than following the route. This topic has been approached in the ‘wandered’ mosaic.

Wandering in the 21st century brings special circumstances. Culturally we carry relations with the environment as nomad, conqueror, pilgrim, flaneur, tourist to terraformer (Lemaire, 1970). Where nature watched the pilgrim closely, the tourist is absorbed with himself: the environment is just a beautiful backdrop or reflection of his or her abilities. From the background of the Anthropocene, a new layer is added: the traveler is aware of the effects of the journey on the landscape and that the separation between man and nature is a fantasy. The traveler is not only an observer or consumer of a landscape, he is also part and designer of it (together with other actors). In this way, the relationship of the visitor and the visited (nature-culture) is permanently intertwined and all acting parts can be seen as responsible players. With the awareness that the wanderer is intertwined with what goes on in the landscape, it also becomes clear that the environment influences the wanderer: the idea of the 19th century Flaneur who was still relatively naively able to let his ‘dérivé’ be guided by the impressions along the way and could distance himself from the context is no more. The city is full of tourist traps and ways to help you find your way back, such as a highway in the distance, GPS in the phone or other traces of the built environment. So there are obstacles that can hinder the dérivé. Besides the temptation, popularity or comfort that lures the walker to places, there are also aspects that keep people away: fencing, privatization, ownership and fear of breaking rules, confrontation and the unknown.

‘Forgotten’ places sometimes have so little order and control that they give less direction to the dérivé. Because in these places there is less control over the usefulness or purpose of the place, this flâneur is freer to relate to that ‘ecology of truths’. Because of their freedom as ‘no man’s’ land, these places have therefore been approached as suitable places to facilitate reflection on literature, design and discussion.

Barriers sometimes have to be broken. As a result, wandering is sometimes more or less breaking in, crossing over and being sidetracked. The art of changing direction is an 'obligation to disobey'. The trick is to take turns that don't seem logical and are contrary.

1.12 FOUR STEPS FOR WANDERING SPACE

So, how to wander? The process of wandering and noticing consists out of 4 parts: witnessing complexity, floating attention, projecting articulation and characterizing minimal interventions.

- First comes **witnessing complexity**: seeing that the space consists of a multiplicity of overlapping territories, and that spatial and legal boundaries marked by fences are just one aspect of what can be seen as boundaries. A territory can be formed by its soil, landscape, sunlight or human presence, depending on the perspective. In witnessing this, it is about acknowledging the plurality of transitions between and representation of territories. Different influences play in the area. In this phase it is helpful to get as many perspectives about the area as possible. This can be from artists, experts, decaying walls, archives, tracks, residents, garbage, pets, researchers to designers. In witnessing, it is about collecting and acknowledging meaning for every spot in the territory- noticing that all 'space' has a high probability to contain 'place' depending on viewpoint. And that there is not one way to say an area stops here or there: the spot is just a link in a cascade of invisible scales. The collection of data has to be completely open without a prescribed method since all data is approached as of the same importance.
- The next step is sensing and observing with a **floating attention**. Through this approach, the perspectives searched come alive at the stage. This is not about defining their relationships but getting a sense of

the space as a breathing entity through time, and noticing where those territories interplay. By stalking, regular return and different movements through this entity, rhythms and changes become more lucid. In floating attention, it is about getting a hunch of the processes and rhythms at those places. Through this process, not only are spaces explored in different ways, also differences in speed / slowness of change in places are noticed. Cross-sections where different 'realities' overlap in terms of influence and time are spotted. Those spots are cross-sections of meaning and carry the possibility to exchange and enrich differences.

- **Projecting articulation** is about how richness of meaning and difference can be grown through time by what types of articulation. Designing a project here is purely hypothetical. How would a space unfold if what type of project is created at the intersections? How many and what voices are now articulated? Is there a strategy towards the unknown? Reflecting the unfolding of projects can help discover the positioning of the projecting party, new connections between realities and new perspectives upon meaning and place.
- **Characterizing minimal interventions** dives into the act of doing and making. Instead of imagining the scenarios, it dives into how the above three can be facilitated at that intersection and by what design principles. For that the above three can be used to approach existing and fictional projects. To develop those characteristics, experiments can be made.

1.13 CHARACTER OF STUDY PER PART

Given the exploratory character of this inventive, grounded theory-based, context-driven thesis, every 'mosaic' is layered, as a collage of philosophies and methodologies. The most

important issue was to link those different parts and formulate a cohesive outcome to the explorations and experiments. Different methods and data inquiry were used to align with the objectives of each 'mosaic'.

The theoretical based mosaics (1-2) describe the scope of the issues that this thesis seeks to approach. It therefore mostly relies on the review of literature and personal positioning. Based on observations, notes and the author's own voice, other sources are visited to strengthen the argument. This argument involves the use of the embodied experience as practitioner, in the context of wicked problems. Specific ways of working and the tools I used involved diving into theory and analysing my own feelings. Theory offered many directions and voices to be taken, but the choice of where to stand as a researcher depended on their interpretation and positioning.

In the more site related mosaics (3-4), there is a strong relationship with (design) action research. An approach is formulated that used methods of site visitation, and other perspectives applied to look at space. In these mosaics I rely on theories, drawings, site visits, interviews and design projections. More specifically, I look into SI's psycho-geography (Coverley, 2006), 'détournement' (McDonough, 2004), 'stalking' (Smith, 2010).

After setting out the theoretical and specific context, I look at how other designers have behaved with their projects and what their attitude towards the existing place means. For this mosaic (5), I have written design critiques, sketched places, visited existing design projects and read articles about those mindsets and projects. They are a 'collective case study.' Then, I conducted a small action-reflection project to use an artefact for discussion of the process. Looking at these issues helped formulate principles for designing with intentions for the unintentional.

In the final part (mosaics 6-7), I describe the patterns, lessons and findings that can be highlighted from the other mosaics. For this, I used a mapping of the different layers that were apparent in each chapter. In the fold-out page (see: complex mosaic diagram) we find a mapping of the layers and research throughout the journey. This mapping helped provide an overview of the story and showed patterns by overlapping the different layers, such as authors, interviews, other people's projects, theories, locations and emerging questions. This overlapping and complex linkage led to new insights and hints about the purpose of each chapter and eventually the whole thesis came together.

In Chapter 10 'condensed' the core themes and essence of the work is summarised. Chapter 11 contains the final picture drawn, the conclusion of this work. Chapter 12 contains a the translation of this thesis into a playful moral appeal.

2 THESIS NATURE through discursivity

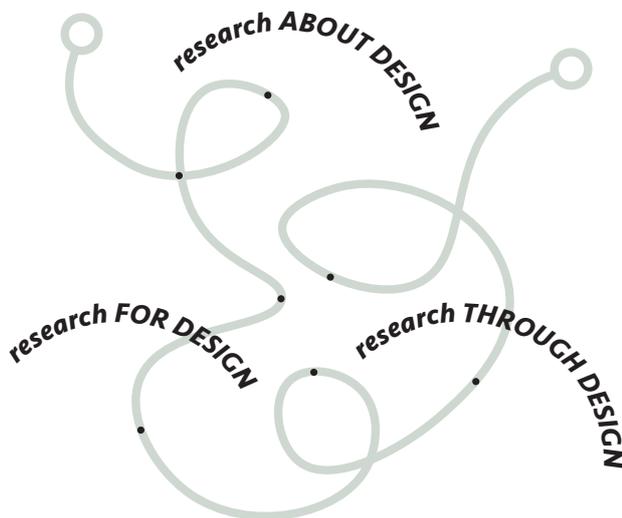


Fig. 1 A non-linear and discursive path through multiple fields of design research

2.1 RESEARCH AS A DESIGN PROCESS

Dionysus is the god of wine and dance, of irrationality and chaos, and appeals to emotions and instincts. The Ancient Greeks did not consider the two gods to be opposites or rivals, although they were often intertwined by nature. Cooperation between the two has been separate and supported ever since. Nietzsche, for example, also called for chaos and rationality to work together in the *Birth of Tragedy* (F. W. Nietzsche, 1968) and leading design researchers are aware of the 'marriage between artistry and applied science' (Schön, 1988).

This attitude, not unknown in the design discipline, is powerful when it comes to dealing with complex situations full of undefined problems, and it can inform other disciplines with strategies and methods for dealing with complex issues. Formulating a general theory is a problem in planning: in this research 'the formulation of a wicked problem is the problem' (Rittel and Webber, 2000, p. 328), and research is seen as 'learning from design.' Learning is best conceived as a process, rather than in terms of outcomes: learning is the process whereby knowledge is created through the transformation of experience.

2.2 AIMS AND OBJECTIVES: DYNAMIC

A mapping of the research topics, purposes and actions helped to divide the research in different parts (Fig. 2-4). The aims and objectives of this thesis are related to finding hints that reveal integrated ways to combine (but not in a pre-determined way) different fields of knowledge with site visitation and idea projection central to the process of understanding. This involves engaging from different perspectives, research and design interplay. We can describe four

main areas of research objectives in this thesis that later link to different approaches in design research. The lessons learned reveal the argument made through those objectives.

- The first objective, finding an approach and relationship between research and design, is achieved by investigating what problems of planetary significance are and how to look at them from a designer's perspective. What are wicked problems and how can practitioners approach them mentally, physically or even emotionally? What if we want to acknowledge the subjective individual role of the designer as vital to approaching those problems? Reading literature about urgent wicked problems highlights their relevance and a theoretical jump-start is made (Buchanan, 1992). By conducting improvised interviews with academics, practitioners and critics, the research could describe a range of positions to adopt within this, ultimately influencing the values one would impose at the site. In those mosaics, I describe the problem and provide a spectrum of positions that function as a guiding theme (mosaics 1-2). The lesson here is that the design process unfolds alongside context and practitioners need to be aware of the character of high complexity matters which they can best learn by using their voice actively - a matter of *response-ability*³ (Brown & Dille, 2012).

3 *'Shared suffering'* demands more than representation, it demands active 'copresencing'. It demands not closing ourselves off (often a coping strategy for the distasteful) from research subjects. Instead, we must cultivate sensitivity towards the other (through our bodies and the somatic expertise of others). Haraway terms this kind of ethical comportment *'response-ability'* (Haraway, 1997, p. 71). Thus, rather than establishing the ethical rights and wrongs of an experiment a priori, members of ethical committees, who do 'caring at a distance', perhaps should be tasked with letting their imagination be forced to articulate, feel, be open and receptive to the suffering which emerges as a result of the experimental process'. Found in: (Greenhough, & Roe, 2010, p.44).

- The second main objective is approached by engaging with physical spaces that could represent fragments of the problem. In this part, the aim is to learn from those places before implementing 'designerly ways' of planning new projects (Cross, 1982). The challenge is to hold back, unlearn and meet the place in a way that is not imposing – but instead really meet and understand the 'monster'. In those mosaics, I describe theoretical approaches to space and site visiting, which I demonstrate through my own journey (mosaics 3-4). The lesson here is that the practitioner can emphasize site specific value by seeing qualities in what is undervalued, by loving our monsters, through erratic and inventive methods of analysis. To do this, he or she has the obligation of disobedience in order to challenge existing values.
- The third objective is to actively engage with design processes that work with the emergent qualities of the place. For this, I visited the works and mindsets of other designers, mixing those strategies with the knowledge gained in the other mosaics and proposing small design projects. In those mosaics, I carry out minimal interventions that stand for the discussion of this research and design journey (mosaics 5-6). The lesson here is that practitioners can use practical design to frame new ways of looking, which can be by highlighting the potential of life in a place, form following potential and hinting at Anthropocene fiction.
- The last objective is to learn from those experiences by looking back and finding patterns within them, with the aim of finding signals that might be useful to other designers and academics. Although the goal of this research is context-driven and steered by the voice of the author, the assumption is that some of the results

may also prove useful for other design and project-based practices (mosaics 7-8). The lesson here is that practitioners can express relationships of decency in terms of the place and meaning of their interventions when proposing values.

2.3 A DISCURSIVE STRUCTURE

The main aim of this thesis is to challenge highly complex, non-linear problems with the author as a researching practitioner. Or: breaking between the distinction between maker and thinker. The objective is to unravel parts of this complexity, or, failing that, merely to approach this complexity through thinking, doing and feeling. The mosaics are not formed chronologically but organized by different actions and perspectives. In addition, the names of the mosaics all represent an emotional state, an action and conceptual way of thinking.

In order to find a cohesive way to map design-related research within the scientific field, we can build upon the matrix set out by Frankel and Racine. In their work, the authors strive for insight into the complex field of design research. These fields are: research for design, research about design and research through design (Frankel & Racine, 2010). In Figure 6, derived from their work, we can see how practice and specific, general and theoretical approaches relate to each other.

This thesis consists of 4 main parts: *teoria*, *poesis*, *praxis* and *síntese*. After *thesis nature* and before the closing *manifesto*, the 4 parts represent my research and the PhD journey on which it has taken me. Eight mosaics are grouped into the main body (mosaic 2-9). These are closely linked to different approaches to research, respectively: basic, clinical and applied research. In relation to design, these can be called research about design, research for design and research through design (Frankel & Racine,

2010).

As stated in Van Dooren (2014), Schön (1985, 1987) describes designing as 'a situation of complexity and uncertainty which demands the imposition of an order' and 'experimenting with a hypothesis.' The guiding theme throughout this research is the idea of 'letting go': letting go of control and planning of the now and of paths into the future (Van Dooren, Boshuizen, Van Merriënboer, Asselbergs, & Van Dorst, 2014).

The theme of letting go helped reflect the data found along the way – how did data inform outcomes beyond control in the Anthropocene? The process works the other way round as well. Not only did it help frame the search from beginning to end – it also was framed by specific questioning of the data throughout. The question of why we should let go is best answered in the 2nd mosaic 'Entangled' and the 3th mosaic 'Submerged', where a position and meaning built on experiences and literature is formulated. Testing and jumping to different concepts and their translation into design allowed me to study the purpose of my research.

Experiments with both thinking and doing helped me question why I was doing things and what I was learning from them. The idea of thinking about solutions in order to find the problem. Here, design experiments were a tool to reveal the meaning behind my projections. I carry out these experiments throughout this thesis. Understanding the meaning of other projects gave me a way to organize the library of knowledge I had gathered. It also enabled me to play with existing concepts and combine them with other people's ideas. As we can see in Boden, there are different types of creativity (Boden, 1996, 2001, 2010).

Making unfamiliar combinations of familiar ideas. Deliberately or unconsciously putting together information. This can be in the form of drawings, collages, diagrams or metaphors.

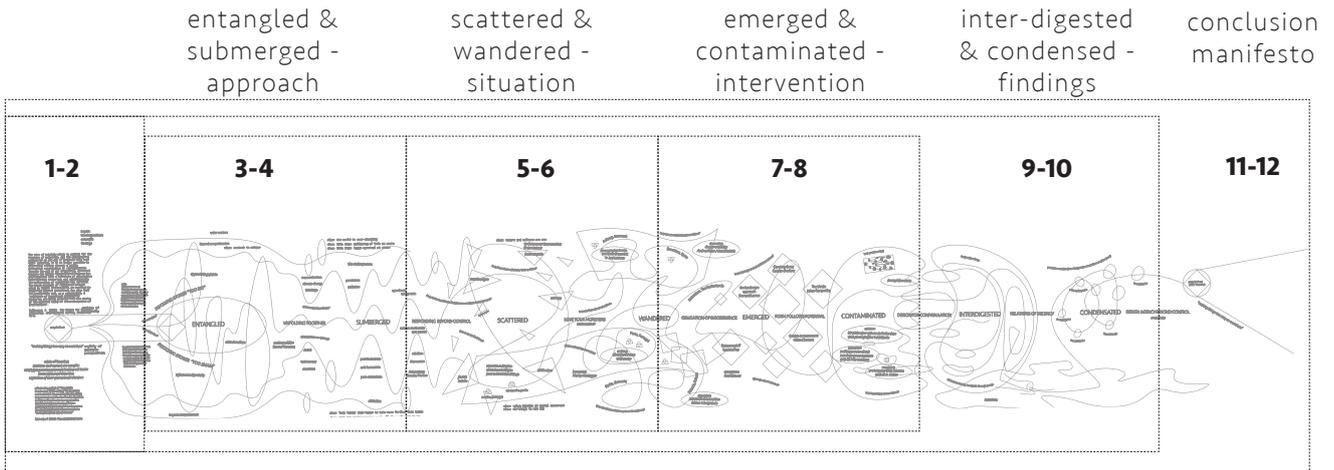


Fig. 5 Overview of chapters and themes according to the diagram (see Complex Assembly Diagram).

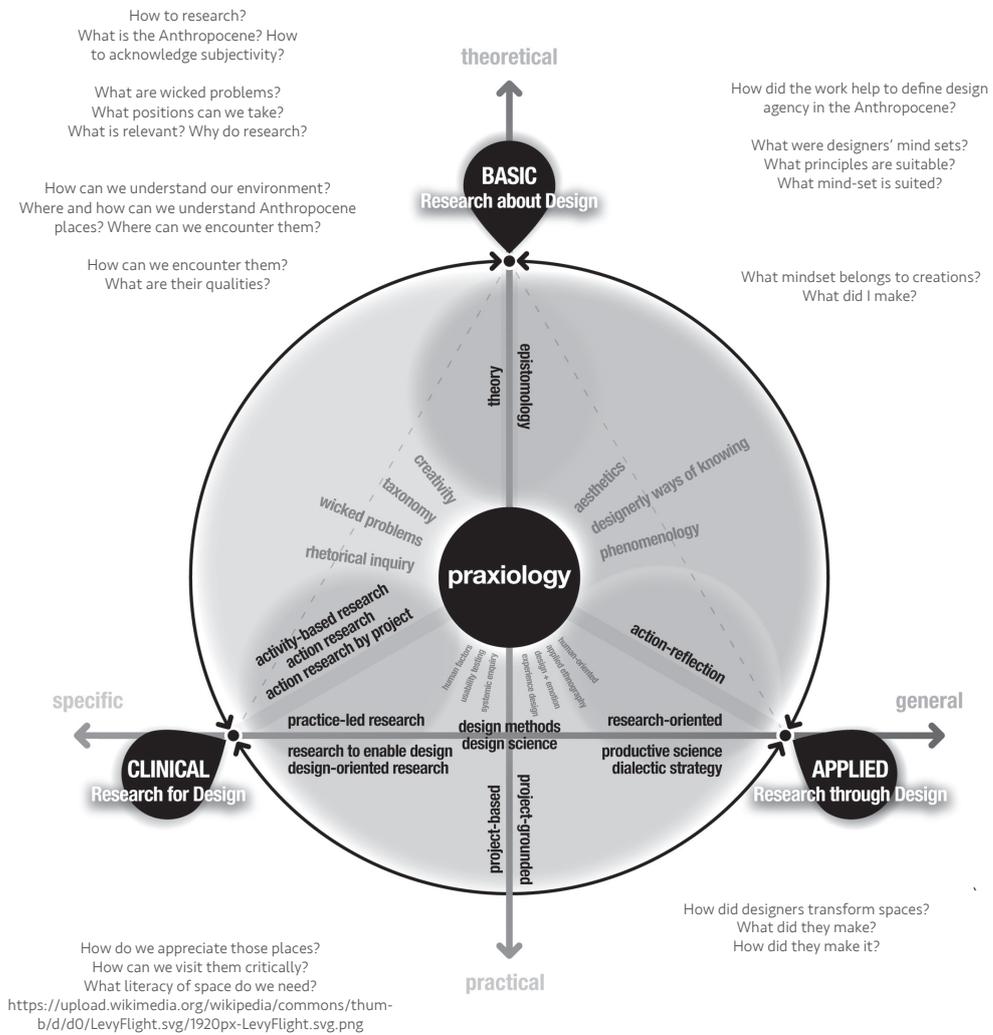


Fig 6. Thesis structure aligned with Frankel & Racine's (2010) diagram, where they explore design research through the categories of specific, practical, theoretical and general. This thesis is an assemblage of different characters in design research with reflective revisits, divided into 7 assemblies.

In order to do this, the designer needs to have a rich 'store of knowledge' in mind. The thought experimentation, with my visual vocabulary of projects, I mostly carry out in the 6th mosaic 'Emerged'.

Imagining and exploring conceptual spaces.

Designers can walk through the concept and find other perspectives to look at by challenging their existing thoughts. This is the 'unlearning' of the projection that I will discuss in the 4th mosaic 'Scattered' and the 5th mosaic 'Wandered'.

Making changes in the space and transforming it. New conceptual spaces appear in your mind that you haven't thought of before. This intervention can help change the perception of the site. I look at this in more depth in the 7th mosaic 'Contaminated'.

2.4 SPECIFIC OBJECTIVES

The specific objectives of this research can be summarized as follows:

- Introduce and validate a discursive, process-oriented way of researching, informed by contextual and subjective data to challenge wicked problem;
- Learn from the embodied experience about places that represent fragments of specific problems. An assemblage of fieldwork. Formulating a critical position towards assumptions, approaches and projections help with unlearning⁴ value systems;
- Demonstrate a way of intervening with place, led by the emergent processes, to

⁴ **Unlearning.** To become aware of the limitations / biases of the learned to be able to learn it in a better or more conscious way.

discuss designer integrated intervention;

- Present a proposal for an approach to research and design to integrate context-driven but informed practice;
- Formulate a communicative manifesto demonstrating the voice and argument that is nurtured throughout this thesis;
- Inspire the reader to look differently at the relationship between ethical principles and response-able practices.

2.5 DESIGNING AS RESEARCHING

Design itself has been conceived as a complex, personal, creative and open-ended skill (Van Dooren et al., 2014). The processes, methods, advantages and challenges of design research have been described by Christopher Frayling (Frayling, 1993), Nigel Cross (Cross, 1982), Bruce Archer (Archer, 1995), Kees Dorst (Dorst, 2008, 2011; Dorst & Cross, 2001; Lawson & Dorst, 2013), Friedman Richard Buchanan (Buchanan, 1992), Brian Lawson (Lawson, 1981, 1994, 2006, 2013; Lawson & Dorst, 2013), J. Zeisel and others. Schön describes what happens in the design studio, and others like Darke (1979) and Lawson write about the design process in general.

Frankel and Racine's mapping of the complex field of research was the result of an extensive literary review building on the perspectives of authors such as those mentioned above, helped me structure this thesis in three parts. As seen in Figure 5, eight mosaics fit into four parts. The figure suggest there is an overlap for some of the mosaics: this is deliberate as some of those mosaics lie on the border between the different parts. They work as a transition between generic and specific research. The character of this transition is explained further in each mosaic.

'Basic research focuses on empirical examination of fundamental principles that

lead to developing theories about design that has far-reaching implications for the discipline'

(Buchanan, 2001, pp. 3-23).

Nigel Cross speaks of design phenomenology, which is 'the study of the form and configuration of artefacts.' This part also looks at the outcomes of these studies. In the 2nd mosaic 'Entangled' I describe the ontological approach of interpretative research and the difficulty of balancing this with hyper-complex urgencies, ultimately leading to a theoretical positioning.

In the 3rd mosaic 'Submerged' I go a bit deeper into describing particular urgencies and the position that can be taken within the discipline.

In the 4th mosaic 'Scattered' a combination of research about and for design is described. Different theories about space are challenged by visiting places around Europe. The 5th mosaic 'Wandered' is more defined by 'for design' and focuses on the practical method of site visitation and collective case studies. In the 6th mosaic 'Emerged' I look at doing case studies to find strategies beyond the individual cases. 'Applied research focuses on investigating general classes of design problems or products' (Frankel & Racine, 2010).

Nijhuis and Bobbink (2012) point out two important modes of research studies through design: experimental design study and design study. Where the former focuses on application and the transformation of types and principles, the latter is about modelling and expression: true design study (Nijhuis & Bobbink, 2012). the 7th mosaic 'Contaminated' focuses on the process of making and thinking together. This is the act of research through design(ing) rather than the result of the project. The design is a 'probe', merely challenging the potential of the problem and the place. The assumption is that the combination of these different approaches is greater than the sum of their parts. The research as a whole can therefore be regarded as a single

piece of design research. In his book, Schön describes the role of the reflective practitioner.

'I begin with the assumption that competent practitioners usually know more than they can say. They exhibit a kind of knowing in practice, most of which is tacit. Indeed practitioners themselves often reveal a capacity for reflection on their intuitive knowing in the midst of action and sometimes use this capacity to cope with the unique, uncertain, and conflicted situations of practice'

(Schön, 1984, pp. 8-9).

In the sense of this thesis and the entanglement of research and design, the researcher is a practitioner with '**tacit**' knowledge. The way the data has been considered is covered in the 4th part and uses tools that are recommended for grounded theory: coding and mapping the path followed.

'When a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of knowing-in-practice which he brings to them. He may reflect on the tacit norms and appreciations which underlie a judgement, or on the strategies and theories implicit in a pattern of behaviour. He may reflect on the feeling for a situation which has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within a larger institutional context'

(Schön, 1984, p. 62).

In this sense, in their reflective capacity, the practitioner is not only looking back at what they have done, but also at what their intervention represents in the world, how it might unfold towards possible futures.

This reflection helps create awareness of the influence the practitioner has beyond their understanding.

2.6 CONTEXTUAL UNFOLDING

The main topic in this thesis is the entanglement of research, design processes and *contextual unfolding*⁵. The broader problematics emerged along the way: with the focus on the end result, designers can lose their responsiveness to their personal contextual understanding of complex problems. In conventional forms of development, research tends to overlook or simplify the role and context of the practitioner.

However, the practitioner's context plays an important role in the way projects develop. The practitioner's arbitrary positioning, skills, attitude and reflections allow specific data to be integrated, or not.

This research suggests that an open-ended, inventive approach is necessary, especially when dealing with the wicked and urgent problems that we face today. These are related to environmental impact, insight into other (local) cultures and ecological perspectives. To deal with these problems, it is vital to be informed about problems on a larger scale while acknowledging the subjective stance of the individual within a larger field of perspectives.

The linear way projects are described and planned avoids unexpected encounters along the way – encounters that can turn out to be vital insights within the design process. Despite efforts to describe and demonstrate

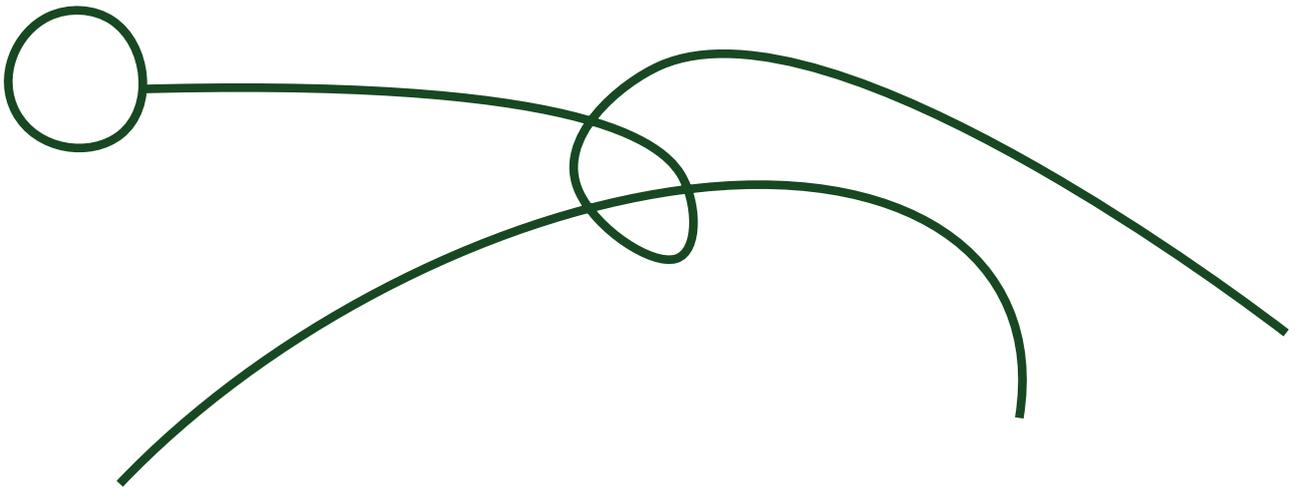
an integrated position on different scales, the challenges mentioned above remain largely unrecognised and unresolved.

For this reason, this thesis investigates a context-driven journey where the author's experiences play the leading role – they inform the path to be taken, they give clues to shaping theories and help structure what is most relevant. As with the human mind, these steps and structures are not always rational. Facing urgent, hyper-complex problems, the designer has to tap into subjective, maybe unconscious ways of knowing – into their intuition and responsiveness to their intrinsic motivation and value system. By unveiling this value system, engaging in different contexts, starting dialogue with others and executing small projects, the practitioner could map and learn more of the situation from his own intuition.

This project works on the assumption that the relationship of previous theoretical understandings of urgent wicked problems concerning our world, combined with the experiences of a practitioner-researcher, can enrich the discussion of what their role can be in 'new world stories.'

This thesis therefore recognizes that the contribution is based to an extent on the author's qualitative understanding. The challenge lies in their capacity to reflect on and communicate the journey in a cohesive voice. The design discipline is well equipped to approach uncertain and complex problems – the understanding and attitude of the designer, and the philosophies they bring to the world therefore seem worthy of consideration (Rittel & Weber, 1973).

5 *Contextual unfolding*: the way futures unfold through the interrelations with the contexts. This basically means to stay in the middle, give time and space the opportunity to influence your work and perception. Instead of searching for a pre-determined factor, let this factor be derived from patterns and clues in the context.



verwikkeld
amaranhado
entangled

verb

1 all four bodies were entangled in a heap: intertwine, entwine, tangle, intertwist, twist, ravel, snarl, knot, coil, mat, jumble, muddle. ANTONYMS disentangle

2 the thread entangles the insect and brings it down: catch, capture, trap, snare, ensnare, entrap, enmesh, ensnarl. ANTONYMS disentangle; release

3 he felt no call to entangle himself in the political questions of his day: involve, implicate, embroil, mix up, catch up, bog down, mire. ANTONYMS steer clear of

(Waite, 2009).

(Eling, Griffin, & Langerak, 2014) as advantage for involving stories that are 'too big' and stories that are 'too small' (Haraway, 2016). By inviting complexity and subjectivity to the table, the conversation unfolds not by setting a clear path, but by acting and reacting to situations.

To back this up, this chapter has a strong phenomenological approach, but always in line with philosophical literature that approaches complexity. This research is not destination driven, or path driven: it is driven by 'living the problem'; the subject is decentralized but there is a search for posture and voice, meaning, as an anchor. There is no hierarchy in knowledge: the paths unfold together, like the petals of a rose (Harman, 2011).

I chose the title 'entangled' for this reason: it aims to demonstrate on one hand the amount of knotting, muddling, mix up and mire in the PhD process – and on the other hand views this as an always contextual involvement, like a trapping into the situation, *thrownness*⁸. To make sense of the world, a *contamination*⁹ of otherness through encounter is inevitable and, with this chapter, is acknowledged as essential for research. The term contamination normally means: *'the action or state of making or being made impure by polluting or poisoning'* (Dictionary, 1989). The world is not a sterile laboratory: becoming or being impure is bound to happen: it is not a matter of if, but rather how

can come and are influential.

8 **Thrownness** (German: *Geworfenheit*) is the concept introduced by German philosopher Martin Heidegger (1889–1976) to describe humans' individual existences as 'being thrown' (*geworfen*) into the world (Heidegger, 1927).

9 The term **Contamination** will appear more in this scripture. Normally it means: 'the action or state of making or being made impure by polluting or poisoning' (Oxford dictionary of English, 2018). I think becoming impure is bound to happen: it is a matter of how we are influenced and aware of encounters (see Chapter 6 Contaminated). It is not negative but it underlines connectivity and a resistance against it.

we are influenced and aware of our encounters. Contamination is not negative, it is a matter of fact. This idea of being trapped, entangled, becomes a core characteristic of the PhD journey.

Within this nest of paths, sampling a bit of every perspective sharpens orientation within the research field(s).

This journey teaches more than just learning how to gather, process and produce knowledge: this experience transforms a world-view. It impacts the idea and meaning of wisdom, making sense out of 'noises of information'. Looking differently at the world impacts the way we live and act in the world today. It may make us a bit more subtle and sensitive. What does it mean to focus on practice or theory, and why is it so important that we understand the links between them?

3.2 NO SINGLE TRUTH

Nietzsche said *'it is precisely facts that do not exist, only interpretations'* (Nietzsche, 1954, p. 458). The start of this PhD was like this sentence coming to life. On this journey, the author's own voice becomes the backbone of the work. The work is a monograph, binding the works of others together through the author's perspective and links to proposed concepts. The research is a journey within the nexus of art-science, not necessarily a journey of or for science. The experience of doing a PhD provided a posture, one where honesty, nuance, subtlety, humbleness and sensibility to the world around us has received greater attention. A more sensible posture can alter the 'literacy' of reading the world, but also the way of thinking in order to react differently to it. Being sensitive to how the world impacts us and how we impact the world is essential for anyone involved in the transformation of the environment. The researcher's quest for truth is one of perseverance, but discovering that truth has proved to be impossible.

In ontological terms, this work joins those who believe there is no single truth: the idea of truth is biased. To come as close as possible to a truth, we need to be honest about research: to be honest about our biases and limits, in so far as we can see them. This honest approach has helped, after struggling with organizing content, writing styles and referencing, to let the author's voice be the backbone of the work. To learn that the subjective work of others is considered valid was liberating, realizing that research work with so much personal influence is still valued.

Doing research honestly means staying close to our own voice, to keep working intrinsically, and stay motivated. Confronted with the sheer amount of knowledge out there, we are humbled. Choices and ideas are based on what is happening in our direct contexts: it is better to acknowledge this and act with it consciously.

'Nanos gigantum humeris insidentes' – We are but dwarfs standing on the shoulders of giants¹⁰.

Standing on those shoulders may help us to look further, to see and know more: but let's not get too excited yet. As Nietzsche argues: the dwarf will only be able to bring down the complexity of the giant's vision to its own level. In a section of Nietzsche's 'Thus Spoke Zarathustra'¹¹ in 1885, entitled 'On the Vision and the Riddle,' the giant Zarathustra climbs to great heights with a dwarf on his shoulders, in order to show him

his most genius idea. Once there, however, the dwarf fails to understand the profundity of this deep vision. As a result Zarathustra reproaches him for 'making things too easy on himself' (F. Nietzsche, 2008).

Nietzsche argues that the dwarf fails to understand true complexity, an issue of scale – it can only come from those rare giants among men – 'each giant calling to his brother thorough the desolate intervals of time.' The giant will never exist as one source: it is a matter of scale; it is the body of information or even knowledge. For some this may sound discouraging, but a humble attitude is vital for staying open, learning more, being attuned to hearing the unknown. A representation of this narrative we can find in Nicolas Poussin (1658) 'Landscape with blind Orion seeking the sun'. Orion represents knowledge and potency that is curiously and subsequently following Cedalion's ignorant attempt to chase the sun.

Why would the giant say this? Does he indeed have a more profound vision of issues that involve much more than is visible at first sight, issues such as sociology, ecology, scale, time and landscape? Compared to the giants' shoulders that we stand on, our individual findings are insignificant indeed.

The most valuable result of doing a PhD, I believe, is not so much about a ground-breaking outcome or an abstraction of the complex, ungraspable understanding of the giant: it is about becoming a researcher, being concerned with a worlding aimed at wellbeing, understanding the meaning of processes. It is developing a posture, which is enhanced by a set of skills such as finding and following intrinsic motivation, curiosity, becoming 'noise-wise,' acknowledging entanglement, being open to the unknown and aware of contextual contamination. We could say that the PhD is the 'driver's license' of the academic world, an invitation to reach for the shoulders of giants: not to pilot them, but to observe their

10 *Standing on the shoulders of giants*. A saying used by writers and scholars such as Chartres and Newton, to refer to the understanding that knowledge and intellectual progress comes from the understanding of those who have contribute to knowledge in the past.

11 *Also Sprache Zarathustra*, Op. 30 (Thus Spoke Zarathustra) is a tone poem by Richard Strauss, composed during 1896 and inspired by Friedrich Nietzsche's philosophical treatise of the same name. In *2001: A Space Odyssey* the play is used as the opening scene (0:00-19:55), introducing the discovery of tools, which has enabled advantage over other species for millions of years (Kolker, 2006).

unpredictable behaviour while attempting to take in the complexity, to 'live the question.'

Understanding the trouble that comes with scale allows the traveller to meet the giants of our time. The life-changing PhD journey, after many discouraging moments of self-doubt, boosts us with the confidence to continue, not to fear the giant and to get used to the presence of the unknown as part of everyday life. The confidence to keep listening to an internal voice.

Recognising or acknowledging giants gives us sharper eyes and challenged minds that are more receptive to encountering the unknown. Receptivity to darkness aids critical thinking.

It is challenging to search for something you don't know. You might analyse a familiar map and spot an undiscovered place to investigate. The research would be led by the character of the research gap. A vital part of that is that, besides being unknown, it has to be relevant. Doing research means creating conditions for finding novelty while being motivated by particular values, rather than just searching for the solutions. The means are not justified by the end – the means are the end. Successful research concerns itself with relevance, feasibility, transferability and the potential for novelty.

3.3 A WAKE-UP CALL

'Landscape, that used to be the exterior of the city, is now losing its role as such, and it becomes harder and harder to distinguish them. The contrast of city and landscape and the understanding of its meaning is fading'

(De Wit & Aben, 1999).

The world itself is a giant we fail to understand. One problem is that the multiplicity of ways that those living on earth view the world is

never-ending. And defining it would not be enough: the world itself is ever-changing. For example, more than half the people on earth now live in cities. By 2050, it will be more than two-thirds. Cities have grown so much that the dualistic city/countryside-style thinking is redundant. As curator of Rotterdam's International Architecture Biennial 2014 'Urban by Nature,' Dirk Sijmons (2014) called attention to the Anthropocene: our current era, where human beings alter the world more than natural forces do.

This idea gives us a *wake-up call*, as Sijmons puts it. Optimistically, I believe this wake-up call can be seen as a new start, where we familiarize ourselves with complex understanding, as well as responsibility, in urgent times. A new start, where we aim to get acquainted with processes of becoming. Beyond the biennial, the problem of this complexity has been raised by others. To the question of how to react to complexity, there is an unsatisfying strategic answer: there are multiple answers. The answers relate more to ways of dealing with complexity rather than solving it. Moreover, they seem to fall into a certain posture.

The question raised in this thesis is: how can designers react, take that posture and reconsider the idea of problems? With subtle interventions they could redefine and re-write the way visitors read the landscape. They can work with an approach that is more sensitive to the existing giant of knowledge. To do this, the individual should be honest about their motivations, never hide behind ideas and strict outcomes to validate their decisions. How do they make sense in an overload of information, relationships and stakeholders?

How can we be true to our intrinsic need to contribute to the world when we are struggling for money, or consumed by fear? Are we deeply motivated to express compassion for those around us, or are we tempted to control

our lives and environments? What kind of experiences can help us acknowledge the fact that everything is entangled, contextual and contiguous? How can people be aware of interconnectedness – a mindset for entanglement and receptivity to contextual contamination? Can we become aware of the existing construct of ‘us and them,’ to make deliberate choices to reassemble an idea of interconnectedness?

3.4 CONTINUOUS RECONSIDERATION OF VALUES

From a design perspective, values help designers make decisions in the process of making new products. They can function as a compass within the labyrinth of issues we face today. Values help give direction to what is important, valid, beneficial and encompassing. Projects are not the only thing that can bring new value to places, people or things: new belief systems relating to values can as well.

The wake-up call of the Anthropocene is linked to the urgency of acting – the plethora of natural disasters, pollution, mass extinction of species indicates the need for a shift in attitude. It is a time to welcome alternative ways of looking at nature and the planet, inhabited by multiple species in our built environment, that help us respond to the environmental issues we face in the Anthropocene. This transformation evokes a complex set of queries that cannot focus only on a specific desire. There needs to be awareness of the consequences in relation to a new idea of wholeness, an attempt to not make it ‘too easy on ourselves,’ as the giant said to the dwarf.

A new idea of wholeness led by an urgency for survival, that leads us to a more easily implemented, non-dualistic Romanticism, a search for engagement to deal sensitively with the unseen. In Medieval times, nature was

repelled: the *human condition*¹² needed to be protected.

In the Renaissance, nature was seen as inspiration for human creativity and was an expression of intelligence. For the Greeks this intelligence was nature’s own intelligence, for the Renaissance thinkers it was the intelligence of something other than nature: the divine creator and ruler of nature. During the Enlightenment, the age of reason, nature was to be subject to human ingenuity. As reaction, Romanticism sought to look find appreciation in nature again, as something spiritual and pristine, resulting in terms such as ‘*sublime*’ and ‘*delight*’ and paved the way for modern day conservation and environmentalism (Steenbergen, 2003).

The Romantic idea of pristine nature can be reconsidered for our modern age. This gives rise to novel opportunities to define approaches and relationships between designers and their environments. To explore those new encounters, we draw attention to what has been neglected, overlooked and ‘supposed’ to be valueless because here the role of nature and human influence become entangled, and challenge the way we think about *the pristine*¹³.

3.5 LOOKING AT THE INVISIBLE WORLD

Hades is often described as the head of the underworld and is associated with death and decay. Hades means ‘the unseen one,’ king of the invisible world, god of riches and new

12 *Human condition*. The condition of being human, being in a human body, acting and thinking on earth: having to yield to the state that we are in.

13 The *pristine* was extended to describe the notion of an unspoiled, uncorrupted, or unpolluted state. And what is unspoiled or uncontaminated may connote the freshness and cleanness of something that has just been made, which explains how pristine has also come to mean “fresh and clean.” Found in Merriam-Webster Dictionary. <https://www.merriam-webster.com/dictionary/pristine>. Accessed 30 Sep. 2020.

beginnings: Hades represents rare minerals and winter. Death made room for the next spring, brought by the affairs of the queen of the underworld, *Persephone*¹⁴.

Following a grounded theory approach – theoretical justification through experience – as the author of this thesis, I am fascinated by the bias of value, given that our biases steer our experiences. I delved, through my own senses, into the character of the invisible world, the not-valued. Places and things that are considered valueless say something about the stories we tell ourselves. To see places and things in a different light, it is perhaps necessary to start telling ourselves different stories. It is impossible to become a blank slate. But by describing value from a different angle, we might find new ways to work with the qualities these stories contain inherently and open ourselves to acknowledging collective blind spots that impact our connection to the world.

Responding to an existing place's authentic happenings can be a sustainable strategy of working with it, since it is not forcing new happenings upon it. Seeing value in a different way makes us more responsible to what's at stake in that moment. One author that has influenced my thinking is Donna Haraway. As Haraway states, being able to respond to what is at stake, means 'staying with the trouble' and enables us to respond to the realities around us, rather than washing it clean, deleting it, to match our ideas.

In her persuasive book, Donna offers narratives on all other living beings, meaning plants, animals and humans, *critters*¹⁵ in

14 As the Greek myth goes: Hades wife *Persephone* stayed (first unwillingly) for 1/3th of the year with Hades in the underworld. Persephone's mother Demeter's powers of fertility and vegetation would not work on earth those days, missing her so much, causing winter (Fry, 2019).

15 *Critters*. Haraway uses the term to describe

*Terrapolis*¹⁶, and the way they are always together, dependent on each other. Haraway advocates 'making odd-kin,' a familiarity with the unfamiliar (D. J. Haraway, 2016). In addition to the content, her work demonstrates a method where the use of words can facilitate new perceptions for togetherness, contamination between concepts and the idea of interrelatedness. Being articulate with words helps us be articulate in thought and action.

To cultivate a sensitivity towards the other, Haraway terms this way of feeling, being open and receptive to others a 'response-ability.' The term response-able encapsulates the question for practitioners in urgent and complex times, so it is gladly adopted throughout this thesis. Haraway's work does not only create new literacy and articulation for matters and empathy, it also inspires others to speak, make and act with those intentions.

There is nothing new in giving beauty or value to the valueless through architectural transformation: much research and design has moved in this direction: we can think of *dirty realism* in the 80s (Hemmingson, 2008), articles de-constructing the modernist institute of architecture, contemporary approaches to forsaken heritage or even ancient approaches such as the Japanese *Wabi-Sabi* or *Kintsugi*¹⁷, all of which see added value in what is broken (Koren, 2008).

creatures on earth, including humans, non-humans, microbes, algae, plants, machines and cyborgs. She argues that the term is more inclusive.

16 *Terrapolis*. Haraway's term for the populated earth.

17 *Kintsugi* also known as kintsukuroi is the Japanese art of repairing broken pottery by mending the areas of breakage with lacquer dusted or mixed with powdered gold, silver, or platinum, a method similar to the maki-e technique. As a philosophy, it treats breakage and repair as part of the history of an object, rather than something to disguise. Retrieved from <https://en.wikipedia.org/wiki/Kintsugi> at 07-09-2020.

In some cases, these approaches are popular ways to bring new capital value to places – for example transforming an old factory into a ‘Berlin style’ office. Beauty in this context, however, is instrumental for attraction, and for economic growth. Beauty is not approached but used. The values behind the use of aesthetics can be different. Not everything can be beautified by material transformation. To do this would be a symptomatic treatment: almost an architectural sugar-coating of a post-apocalyptic dystopia, relieving us of the fear it evokes and denying other realities in play at that moment. Value contains beauty. This requires a perceptual change from the inside out¹⁸. This perception is always changing and is informed by the place itself. Going to places, walking to places to experience them, alters our perception.

Classical, medieval and industrial ruins are often romanticized, whenever they fit into a story of the past, giving us a sense of the mystery of what is lost. There are also ruins that do not represent beauty, but death and disgust. They represent realities that we avoid. They are ugly, desolate, dirty, hopeless, toxic and criminal, dismal, grim, deserted, wasted, arid, stinking, dangerous, hateful. By making thoughtful site visits to ‘valueless’ places, whether transformed or not, and reading literature dedicated to describing the invisible landscape, this thesis describes forms of contact with latent qualities.

We go deeper in on visiting places in Chapter 5 ‘Wandered’. The abandoned ‘valueless’ places provide an alternative to daily life, and are interesting places for ‘critters’ to meet and become entangled. Finding ways to contribute

to preinitialising new socio-ecological balances within our cities and landscapes is one mission of this thesis¹⁹. Definition has much to do with the way we approach spaces. Acknowledging complexity, entanglement, context and our idea of the world as a construct, a world much influenced by human forces – or an ‘anthropocentric’ world – the key point for designers, those who act and intervene consciously in those spaces, is to find out how to behave within. Manners, so to speak. Manners that address values, that make them visible, or make them tactile. Sociologists, ethnographers, artists and writers have been keen to interpret their reality of the Anthropocene. In some of their works the Anthropocene is the apocalypse, the road to the end of the human race. Apart from defining what the Anthropocene might mean, there has been little attention devoted to practical ways social, ecological and spatial design projects can, could or should relate to the outcomes of the period, or why.

3.6 UNFASTENING

Collecting books from different scientific fields that refer to interventions in the Anthropocene does inform us about art related to the Anthropocene, other journeys and wanderings concerning the Anthropocene – sometimes they are just a message of doom. All of those books seem to agree about one idea, though: we have to wander and explore, find origins in many places and solutions in front of us. There is not one solution: it is more a matter of continuous ‘solutioning.’ Solution comes from the Latin *solutionem*, meaning ‘a loosening or unfastening.’ To really learn from the

18 This seems to be a paradox: how can the outside world, the exterior help us to look at it differently. Is that even something we should ask of the exterior, or are we responsible to change our perception from the inside? The matter is that, to change perception about the exterior, the interior needs to connect. Design and art can mediate between those realms

19 In a conversation with the architect Marco Casagrande (Helsinki, 2019) we had contemplated about the role of architecture in redefining new socio-ecological balances in post-industrial cities. Marco called this the “**third generation city**” referring to the generations living amongst industrial ruins and the challenges of climate change.

Anthropocene as a new scenario in which to live and think, I suggest we 'unfasten' our seatbelts, even though it is going to be a bumpy ride.

In this thesis I adopt this open attitude and link it to design. This thesis aims to connect design and Anthropocene issues, but is not a guide for making design in the Anthropocene. Rather, it aims to prepare designers to unfasten their seat belts, a continuous 'solutioning' of their motivations and values as guides. Regardless of any wordplay such as *urge-agency*²⁰, *entangle-mind*²¹ or *response-ability*²², the practice of being aware of one's values is a vital investigation process for designers who think, shape and act.

Words are prototypes too. They prepare *designer-interveners*²³ to deal with the general uncertainty and complexity of the future. They also help them to see value in their own voice, their own opinion and stance. They empower our latent urges to ground ourselves in a questioning attitude. One activity involved in design is the translation from the mind, from the concept to the physical application. The way in which this happens seems to be different for every designer, although some parts overlap. This thesis exemplifies a journey of Anthropocene mapping and an exploration

through the eyes and mind of a landscape architect, the methods of an art-researcher and the hands of a designer, but the definition of those heuristics is kept open. As a *reflective practitioner*²⁴, in this project many methods and materials are approached by touch, vision, smell, hearing and taste. Through literary research, examples and design experiments, this thesis visualizes a bridge between this paradigm shift in the academic world and the rather more intuitive spatial design practice. There are many stops along the way to discover, understand and contemplate the meaning of design practice, our world perspective, methodology, landscape and the role of interventions. Some of these are ready to be processed into academic papers, where I explore in greater depth their role within this framework. The never-ending multiplicity of realities, an ontology of *critical realism*²⁵, and the insights gleaned from the author's journey form the backbone of this thesis.

Within the philosophical branch of critical realism, there is a difference between the real world and the 'observable' world. The 'real' world is a realm that is richly interpreted in different ways and from many different perspectives, human, non-human, object and

20 **Urge-agency.** An agency that works with the designer/intervener's intrinsic motivations / urges while acting with urgency: now and applicable Also: an agency aware of human urges to overrule

21 **Entangle-mind.** A mindset considering a wholeness of actors within the large complexity of contemporary problems, being receptive to the contextual knowledge, acknowledging informed subjectivity always is contaminated

22 **Response-ability.** The capacity to be receptive to inherent qualities of a place and react with manners, with sensibility to what is other than us. 'You become responsible, forever, for what you have tamed.'

Antoine de Saint-Exupéry, *The Little Prince*, p.84

23 **Designer-interveners.** Creators of new relationships through design that consciously intervene with invisible processes.

24 **Reflective practitioner.** Donald Schön's term for makers that contemplate their work. Can a thinker that makes projects in order to contemplate his or her thoughts then be called a practicing reflectionist?

25 **Critical Realism** divides the idea of the real as a realm that we can never totally grasp. Within this branch of philosophy, there is a difference between the real world and the "observable" world. **Speculative realism** is a movement in contemporary Continental-inspired philosophy (also known as post-Continental philosophy) that defines itself loosely in its stance of metaphysical realism against the dominant forms of post-Kantian philosophy (or what it terms "correlationism") such as Graham Harman and Timothy Morton (Morton, 2017; Graham, 2018). **Transcendental realism** is a philosophy of science that was initially developed as an argument against epistemic realism of positivism and hermeneutics. The position is based on Bhaskar's transcendental arguments for certain ontological and epistemological positions based on what reality must be like in order for scientific knowledge to be possible (Sayer, 1999; Wikipedia, 2020).

even cyborg. Happenings in the environment are caused by invisible structures and influences – therefore the world must be understood by acknowledging the existence of those incomprehensible, invisible structures, like taking the ‘integral’ of a graph. It is through this lens that the research gap, scope, problem statement and context of this thesis are approached, making no attempt to solve or fill it but instead to go around it, encompass it.

‘The idea of totality which is central for the thinking of modernity, and the accompanying notions of an era and of progress have lost their validity; it is no longer possible to understand reality through a single conceptual construction or representation. Towards the end of our millennium, universal history has become impossible as history has disintegrated into a multitude of alternative heterogeneous histories, and simultaneously the perspective of redemption has vanished’ (Pallasmaa, 1994, pp. 74-9).

3.7 EMERGING WITH THE RESEARCH JOURNEY

Some aspects can never be predicted, they will always be open to complete change, outside our framing, as Deleuze argues with the *virtual plane*²⁶ (Deleuze, 1994). To approach these unpredictable and unreachable part, we rely on common sense, hypothesis and experiment, but also on acknowledging that there will never be one absolute answer. What we can do in the laboratory is to move with honesty and see it as a place where we can approach spaces from multiple perspectives.

Assuming that the Anthropocene potentially leads us to a new mode of living, how would we need to think about the (design) actions that alter the world around us? How can spatial design contribute to this task? Or in what way can we prepare the tools so as to be ready to act on this task?

Considering the large amount of literature around the Anthropocene that emphasizes environmental issues caused by human actions, it becomes clear that many of us are thinking about the issue, but the question of how to act is a difficult one. The translation of problem-matter into design-matter shows that a black box is left: (how) can designers actually respond to this understanding? How can they find and implement values for wellbeing? The mixing of nature and culture creates confusion as to what nature actually is. We create nature and nature creates itself, nature creates us, and we are nature: from parks to wilderness, to forsaken land such as industrial buildings and construction sites. It is not about controlling or focusing on the endgame by dominating the problem, but about taking responsibility for our role in a shared struggle for life – an issue that demands renewed engagement.

For this reason, there is no clear gap to fill. This gap will always be blank: there is no absolute answer to uncertainty and complexity. However, there is something else that can be done here. We can also circle around the unknown and discuss how to approach the issue. We can emphasize this mission for design in the Anthropocene, so that designers and residents can gain the skills to adopt an open and confident mindset to deal with ambiguity, incongruence, neutrality and uncertainty. This thesis is a plea for intuition.

Proposing the Anthropocene as a conceptual framework for designers working with the environment means making every encounter with this issue a way to define the shape of the

26 *Virtual Plane*: the total manifold of potentials that a situation has. See page 81.

research gap. This is the study that is needed, and it goes beyond just filling a gap in the literature: the study illustrates an optimistic response to the mess, the garbage, decay, *entropy*²⁷, chaos and death of 'virgin landscapes,' without denying or disassociating them, but by giving them a place in our hearts, allowing ourselves to learn from so-called failures, rendering us resilient and adaptable to the future.

Hypothetically, this new engagement is stimulated by 'messy frame' interventions that indicate a playful attitude towards these marginalized spaces: humans can explore in a playful manner, but also work to facilitate biodiversity. This emergence with the journey provides a research that is rather exploratory than explanatory. It is almost a journey of 'Bildung':

'Bildung, truth and virtue must be disseminated to such an extent that the "concept of mankind" takes on a great and dignified form in each individual. However, this shall be achieved personally by each individual, who must "absorb the great mass of material offered to him by the world around him and by his inner existence, using all the possibilities of his receptiveness; he must then reshape that material with all the energies of his own activity and appropriate it to himself so as to create an interaction between his own personality and nature in a most general, active and harmonious form'. (Westbury, Hopmann, & Riquarts, 2012).

3.8 CONTEXT

Under the guise of improving human wellbeing, capitalist societies focus on economic growth and expansion. Despite the growing world population – estimated to reach 9.7 billion by 2050 – abandoned urban structures remain neglected. These places, originally formed by human influence, have come to exist through a lack of new programming, often because of de-industrialization, aging, shrinkage, migration to cities, political and economic shifts, cultural change, natural disasters or ineffective design.

The consequences of these rapid changes can be seen in our spatial environment: empty villages, decaying factories, vacant lots in the city, neglected agricultural land, polluted and exhausted mines, WWII bunkers, nuclear storage, sanatoriums, abandoned dams and amusement parks, bankrupt hotels. Rapid development and planning in our densely inhabited urban environments create ambiguous places, such as the wild grass between infrastructures, urban structures planned speculatively, ill-considered planning and unused parts of buildings such as rooftops, façades, redundant infrastructures or dead ends.

In the capitalist, rather aggressive way of dealing with space, in other words with the idea of ownership, top-down division of land by drawing lines on maps and an obsession with growth, this list is likely to continue to grow. The consequences of these changes are contributing to the degradation of biodiversity and our feeling of safety. These places can be called *terrains vagues*²⁸, or brownfield land. The idea is that they challenge the concepts with which we

27 **Entropy** is a property of thermodynamical systems. The term entropy was introduced by Rudolf Clausius who named it from the Greek word, "transformation". He considered transfers of energy as heat and work between bodies of matter, taking temperature into account. Bodies of radiation are also covered by the same kind of reasoning (Wikipedia, 2020).

28 **Terrain vague.** 'The relationship between the absence of use, of activity, and the sense of freedom, of expectancy, ...void then as absence, and yet also as promise, as encounter, as the space of the possible' (Sola-Morales, 1995). See more on page 81.

live our everyday lives through their ambiguous definition of programming.

The sense of uncertainty and change evoked by these places results in negative connotations. Wilderness, decay and death represent the power of nature. Because they represent chaos and decay, abandoned, wild places are challenged in modern day societies. Municipalities often try to hide or design places 'away' through makeovers. We can think about this as the erasure of urban structures, scaffolding or post-industrial parks. The consequence of the first two of these is that the urban fabric, as it has grown over time, is affected. The last example can contribute to wellbeing but it does cleanse the place of the dirtiness of the undesired. In this way, it hides the problems at play on a larger scale.

However much projects seem to hide larger-scale problems, many of them are still present in our direct environment, although they might be invisible or in other time frames. They refer to the impact of humans on climate change, pollution in the ocean, plastics, desertification and mass extinction of species. They correlate with the way we as humans deal with nature. We must move towards a contemporary worldview that is more open to dealing today with the urgency, complexity and responsibilities of those problems instead of trying to solve them.

Forgotten places can be seen as somewhere to encounter the landscape of the Anthropocene, where the visitor is confronted with otherness, the change of space and time, and danger. In those 'random' places, invisible problems become apparent. Later in this thesis I approach the results of this abandonment as a forsaken landscape: a hybrid of spontaneous nature and architectural decay.

However, considering the global phenomena that describe the realization of the

Anthropocene, the urgency, complexity and dilemmas of responsibility in terms of how humans and nature relate to each other become clear. Wild places, or *wildscapes*²⁹, are an inevitable part of the urban fabric, containing potential for socio-ecological wilderness and a way to reach and understand other scales. Confrontation with change through the changing seasons and decaying structures could expose the visitor to new experiences, while the spatial heterogeneity of decaying architecture is often positive for biodiversity, as it provides micro-climates for many species.

3.9 QUESTION

How can designers shape what values to ask why and guide their agency for enabling socio-ecological wellbeing in the Anthropocene?

This chapter makes the case for submerging ourselves in information, wandering and creating paths with no end result, relating to the work of others, positioning the work of others, turning to action and allowing ourselves to be influenced by the context. Action can take place strategically through small interventions that alter people's perception and allow nature to develop beyond human control: shaping intentions for unintentional *new wilderness*³⁰. The most latent qualities cannot be directly registered through our entangled perspectives, so the making of those interventions requires insight, sensibility, honesty and openness to other invisible aspects. These interventions do need to provide elbow room for those overlooked qualities. In this way they are

29 *Wildscapes*. Environments with qualities of spontaneous socio-ecological events. More on page 82.

30 With '*new wilderness*' I mean not the an idea of pristine nature or re-wilding, but awareness of entanglement and the new aesthetic for a pro-wilderness mode of living. New Wilderness is my summary of terms and meaning for new things and processes that emerge beyond our control and need new approaches to be embraced instead of fought against.

free to emerge through existing energies in the landscape. They can be non-intrusive, empowering and help interweave existing flows. Hypothetically, these interventions can be 'minimal' as they act as a totem for the inherent autonomous energies that dwell in the territory in order for it to develop further. For this, the designer has to unlearn and become aware of the biased, imposing approaches learned in architecture education, the translation of space according to the architectural institution that has been contaminated with many political agendas. The multiplicity of species and objects as equals must be underlined. Products need to take into consideration a virtual plane of multiple temporary phases, different stages of decay, like continuous waves, while being sensitive to non-human behaviours and aesthetics.

3.10 ROOM TO WANDER

This research started by acknowledging subjectivity and multiple realities. Sterile environments – used to communicate consistently in scientific research – are interwoven and ever-changing. Our idea of logic is just one of those possible. An institution exists for a reason. The existence of a faculty for sustainable design does not necessarily mean sustainability goals: revealing the invisible forces of intention and motivations in the world can open our eyes, discoveries often contradicting reason. The latent meaning can be conflicting. This is often more political than presumed. It is a privilege to touch the fringes of freedom where we can see that our thinking seems to work separately within different sections of a labyrinth of experiences that has shaped our biases. Helping our peers to understand this is one of the pillars of education. From an organisational perspective we can describe three ways of setting up a PhD:

- The first involves fitting into a specific research position where the project

focuses on the completion of determined goals. The candidate becomes part of an existing research team with pre-established connections and lists of relevant publications. Often the research gap is already clear.

- A second way to start a PhD is to ask the student to write a precise research proposal. If the scientific board sees the value of the proposal, the candidate is allowed to follow the proposal to the end. The candidate will work on the same theme as their research team but must make an effort to adopt a position within the existing group.
- A third way of doing a PhD, and also the most dangerous, asks the candidate to write a proposal and, after approval, leaves the candidate completely free thereafter, to orient and find a path again. This was the case for this research. This overwhelming experience forced me to learn how to position myself and to become 'noise-wise' myself.

The PhD programme in Design at the University of Aveiro and the University of Porto gave me the freedom and time to wander autonomously and discover some of the invisible motivators around me, such as the fear of death and the quest for certainty and control. To work in this open field, over a long period, research can be steered by an intrinsic motivation to discover and explore. The way in which this progresses is always very personal, and therefore contextual and subjective as well. Finding our reasons – personal but relevant – is vital for the perseverance required on a researcher's journey. It has long been a dilemma to allow this subjective part into the research. But given that this has been a solo work³¹, the process of

31 **Solo-work** only in the sense of finding my own intrinsic motivation to keep this work going. The PhD was a search for truth: truth in personal purpose to keep pursuing. The research, discussions and opportunities have been one of rich collaboration. I mention here my

the PhD journey has meant the making of an autonomous thinker, aware but never apart from the labyrinth shaped by biases.

If we look at the field of design, we see that the creative process is a kind of research in itself, albeit a kind that is less aware of its path. Designers do not carry out their design research as they would a scientific work: associations, intuitions and influences from all parts of their lives are involved and are indeed very welcome. From that point of view, design is biased. Making design a predictable and predetermined process would be detrimental: it would take away the spontaneity of the experiment and contextual interaction in the now: the time needed for entanglement, for incubation, contamination. The fact that this character of uncertainty exists, both in terms of this research and conveying design, I see as a benefit – not something to be eliminated. By diving in, by making mistakes, hidden biases are more susceptible to challenge. The training for this PhD programme in Design at the University of Aveiro shows a strong appreciation of the Arts in research. Reflection on free experiment can make designers agile in critical thinking.

3.11 INDEPENDENCE OF THOUGHT

What helped me in my critical thinking was the financial support of FCT. It allowed me to be independent of personal and institutional agendas in my direct environment. I have often repeated how financial freedom has allowed me to think freely. This privilege gave me distance and allowed me to reflect on invisible motivators that come with making a living. With not having a regular job, questioning everything around me and branching out my research intuitively, I stepped out of the system. This was a solitary process, but I believe it was the

‘unlearning’ of values of which I have previously been unaware in my life and education.

Research helps us stop and think. Within practice, there is a need for commercial viability and efficiency. Without a clear end result in mind, it becomes difficult to start – modern approaches to the industry are anxious to deal with the uncertainty of investment returns. This is understandable if the motivation is to make money or sustain a business, so this should not be seen as the enemy. But within the debate about dealing with complexity and inevitable changes, we are forced to look into the future with a different attitude.

This unlearning revealed my intrinsic motivation to learn and contemplate contemporary problems and design projects in depth. With the space that was given to me for this research period, this journey, I hope to help other designers.

3.12 DESIGN AND ART RESEARCH

Throughout this research, the connection between design, art and research is demonstrated. This thesis invites a combination of research and art, open to thinking about existing problems that might not be seen as immediately relevant or even visible – where solutions are not the answer but ways to ask questions. Where design is not aesthetics or solution, but a way to question and explore. Courage, to unfasten the seatbelt. To go just a little bit further into the darkness, and experiment in order to learn.

By demonstrating conscious design thinking with our environments as part of us, where research about design, for design and through design plays a very important and interrelating role, I hope to encourage other designers and researchers to approach new ways of thinking and doing, to be keen to experiment with the possibility of condensing new and vague

main supervisor Joao A. Mota and co-supervisor Inge Bobbink (see acknowledgements).

paradigms, uncertain dystopian futures, and seemingly borderless concepts such as the Anthropocene. Designers need to be aware of what their activity in their research work means. This is difficult as they cannot rely on practical, 'hard' rules in this. It can be easier to explain architecture than landscape, for example: those walls had to be 5 meters apart, to fit in the family kitchen. The programme and function make the design mission clear, it is 'fastened'. If one thinks about less fixed disciplines such as landscape architecture (should be), the framing of the problem and solution is more complex and abstract and therefore needs more background, a stronger positioning, a better informed voice from the designer.

Secondly, we need to discuss the values of which any designer who wants to relate to the Anthropocene needs to be aware. In this, a rather more experimental motive, daring to cross arts and science, is required to stay awake. With experiments, actions to solve problems might seem clueless or useless – but they encourage a new way of thinking (and thus designing) that is needed to approach the contemporary problems we are facing today. In this, the challenge is to gain the trust of investors to be able to work more with open design. This also allows for crossovers and experiments to take place, which can be the starting point for new disciplines, building trusting collaborations and innovative approaches: contamination.

Ross Gibson (2005) defines researching through art. He provides us with a chain of actions, reactions and outcomes that must be well managed in any productive research process. It is important to mention that these aspects do come from experience as well. The source is partly scientific, but also grounded in art practice. Art and design can set up

*changescapes*³², environments that convey the meaning of change and touch its fragile, ephemeral from.

- First, the researcher identifies a need and defines a gap in knowledge relating to that need. The researcher collects all the extant information around that gap in knowledge. The researcher looks into everything pertinent that is already known.
- Then, the researcher uses a method and a set of experiments that allow him to discover more, in order to go from this known body of knowledge into the world of mystery. By doing experiments, taking risks, plunging into experience, the researcher follows the flow of the dynamics and complexities of action and reaction within the mystery until some shift in understanding is sensed or observed.
- Next, the researcher reflects on the experience/experiment, striving for critical distance to be able to synthesise and espouse the new understanding that can be drawn from the experimental studio work until it can be communicated to the scholarly world, the outside world.
- The academic community is thus given the possibility to discuss and debate this new knowledge. The claimant defends their claim persuasively until it is adopted in the wider body of discourse. The artist-researcher then continues (Gibson, 2005).

32 *Changescapes*. Ross Gibson calls the aesthetic forms that 'dramatise' change, *changescapes*. In their form, material and matter they seem to communicate ongoing change: never finished. According to Ross, they help us to understand and accept complexity and help us know mutability. They do so by making us part of their ephemeral, contingent, fragile changefulness. Gibson (2005). With this explanation, he pinpoints the meaning for doing research through art for approaching complex processes.

These steps illustrate the paths that are taken. Before deciding that this thesis would be that of the artist-researcher, other ways of doing research that were more result-oriented rather than experiment-oriented had to be rejected since it did not align with the approach. This short explanation from Gibson sits parallel to this thesis: the experiment at the core. These are the approaches any designer can use to test and find value. In the case of this thesis, the experiments are facilitated by theory, travel, making design ideas, looking into other projects and creating a small 'proof of concept.' The work is both explaining explorations and exploring explanations, but overall is more exploratory.

3.13 DESIGN AGENCY

An *agent*³³ represents a larger group. Agency means carrying out actions while representing a larger group – those actions or interventions work on the basis of a larger-scale ripple effect through time and space. The word design delves a bit deeper into the role of the intervention: it adds nuance to the nature of the intervention. Within the field of design, this mostly works with form, but that is not the rule. Design contains an intelligence that helps the project survive and sustain itself. This can be done through its shape and the many relationships it forms with its context. A product stays in use when it is suited to the situation.

How do we define this role for design within this vague new Anthropocene era through contextual experiences? How can the designer be sensitive and reactive to those issues in his design process and relate, with his interventions, to a barely relatable, invisible context? How does

their design suit the situation, the problematics of the Anthropocene? How can individuals decide for themselves what this Anthropocene is? Why should we be concerned about it? Using a broad term such as design as the spine of this narrative is a challenge. The field of design is a relatively new discipline and one that is not easily defined within set boundaries. The PhD is firstly approached as an exploration of research and design, combined with contextual experiences, that we can associate with the methodologies of grounded theory, inventive analysis and mixed methods. This work is developed through time and experimentation, with note-keeping, photographs, texts, drawings, travel, designs and conversations as evidence. It demonstrates the need for wide-ranging, unspecified research, as a way into the unknown.

Within the core of these methods is a rather intuitive form of wayfinding, stopping and thinking at the points where quantitative and qualitative data overlap, a skill that develops over time by experimenting and seeking confirmation through triangulation. The disadvantage, or in this case merely the challenge, is that the research becomes complex, can seem capricious and unmethodical. But the point is that the world is unmethodical: like the subject, which is about how and why we need to approach complex problems, the implication is that there is never one path to follow. In this thesis, I chose to explore this multiplicity of undetermined paths through a broad and intuitive spectrum of methods. As one of the few constants in this flow of information, the role of author as researcher and designer finds a new aspect: his presence and intrinsic motivation to learn are the backbone of this research: the assured, informed author as connector.

33 **Agent:** (1) a person who acts on behalf of another person or group (2) a person or thing that takes an active role or produces a specified effect late Middle English (in the sense 'someone or something that produces an effect'): from Latin agent- 'doing', from agere. (New Oxford American Dictionary).

This choice influenced the accessibility and validation of this PhD work. However, we can regard it as one of the characteristics of design that it is dependent on a multiplicity

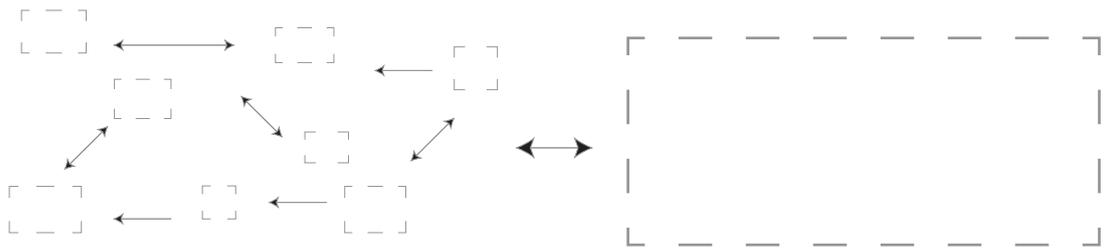


Fig. 7 Two main concurring activities of this research: co-relating smaller independent projects and constructing a bigger picture.

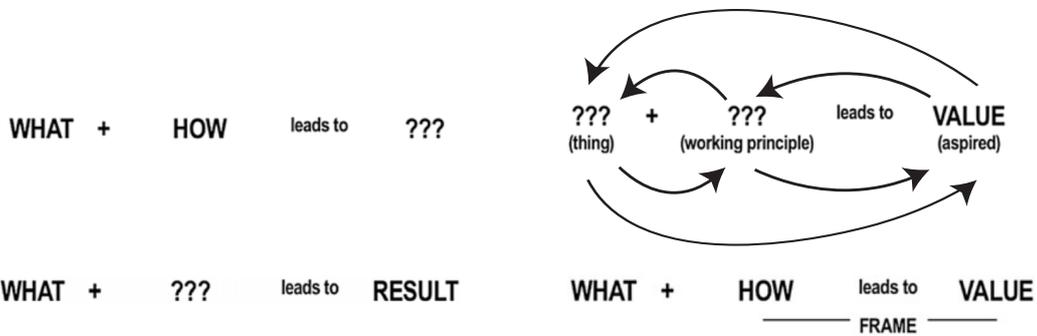


Fig. 8 Deduction and Induction (Dorst 2011)

Fig. 9 Design frame for response to abduction (Dorst, 2011).

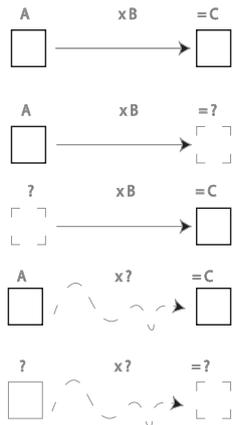


Fig. 10 Deductive way of research gap determination. Based on Dorst (2011). What to do is clear when most of the parts are know and result in a linear strategy. What if nothing is clear from the beginning?

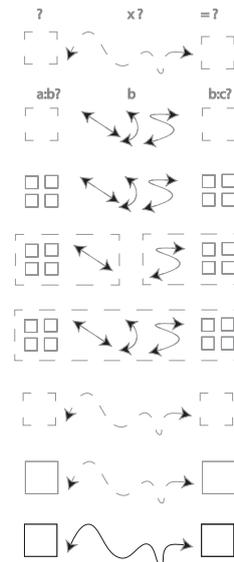


Fig. 11 Co-evolution of problem, method and solution through *intentionality*. Based on Dorst's idea of Abudction 2 (2011). Is done in this thesis, problems, methods and solutions are assembled together by experimentation and put in relation afterwards. By doing design activities, a framework can be created. The dualism between problem and solution can be deconstructed by seeing it as a 'quasi-object'.

of invisible factors. Not least, design has the capacity to bind together loose ends. Landscape architecture has the potential to tell stories that are 'too big' alongside those specific smaller stories.

3.14 ASPIRATION AS CORE

Looking back at the work I have done, this PhD experience has been one large laboratory where texts, papers, books, drawings, talks, experiments and ideas were constantly working with each other. Descartes formulates a theory by using common sense. Later Popper spoke about the hypothesis, with using experiments to prove or reject the work. But relating complex data to such a large scale needs be the re-imagination of another reality.

Connecting stories, meanings and values lies at the heart of design disciplines. Design is more than a question of a 'what + how' that leads to result, but rather a 'what + how' leading to a certain value. In conventional design practice, it is often just the 'what' that is missing, as our values come from education and society (the political and capitalistic motives of which we are often unaware). Finding practical ways to answer the problem becomes the assignment.

For this, we can study existing projects and become skilled in using those references to generate new, varied solutions, enhancing and strengthening the existing framework of values. In this case, however, we start only with the end value we want to achieve. What this means for research is illustrated in the figures above.

Figure 8 and 10 are key to the 'context of discovery' in sciences. It helps define and test hypotheses. Inductive reasoning (from A to B) informs 'discovery' while deductive reasoning (from B to A) informs 'justification'. It is these two forms of analytical reasoning that help us predict and explain phenomena in the world

(Dorst, 2011, p. 523).

When we want to create value for others, or simply cannot grasp the complexity of these aspects, as in design, new parts come into play. It is not solely a statement of fact, but linked to a subjective construct, a value (Fig. 9 and 11). A can be a starting point or eye-opener, B becomes a reassessment of values, C become answers to the journeys taken. This is never a chronological path and all actions are interrelated.

For example, C can influence how A is formulated, and the B values can be reshaped by that. Almost like figuring out a mathematical problem, finding values is about looking into the relationships between the variables.

In design disciplines, we often start with the end value we want to achieve. In order to do this, the question why becomes essential. The research carried out along the way can change the definition of values. The research starts by acknowledging the subjectivity of institutes and scientific research. It is not the intention to pretend this research is solid, or entirely evident (concerning a sterile environment of experimentation). That is the disadvantage of inductive, interpretive research: It won't claim an objective, generic answer. Instead, this work tries to unveil the relationship between the different potential paths of research and how they, in their complexity, contribute to a redefinition of values and thus help re-frame important contemporary questions that might aid us in considering new environments for experiments that have not been seen as relevant before.

'Although frames are often paraphrased by a simple metaphor, they are in fact very complex sets of statements that include the specific perception of a problem situation, the (implicit) adoption of certain concepts to describe the situation, a 'working

principle' that underpins a solution and the key thesis: IF we look at the problem situation from this viewpoint, and adopt the working principle associated with that position, THEN we will create the value we are striving for'

(Dorst, 2011, p.521)

Thinking about relationships, their translation and the way they play together instead of cause and effect, we can dive into sociology of translation. The *Actor Network Theory*³⁴ argued by Latour can be seen as a re-assembly of the social decentralising of human-centredness and in particular certain humans above others. In a sociology of translation, objects are replaced by things. Design is always vulnerable to scrutiny: the question of whether it is good or bad. Design is always connected and concerned with the details of what is proposed. Design is inherently collaborative, prone to the influence of the other (Latour, 2013).

When studying design-related topics, the word design becomes difficult to manage, as it has so many definitions. As we can see, the term stems from the meaning of 'marking,' which gives rise to many more questions: to mark what, why and how? The challenge is to find a way to replace the word in order to find a definition of how the word is used in this specific situation. Could the term design be replaced in this thesis

with another word? This is a demanding line of thought, but the challenge will clarify my position.

As we can see, the idea of 'marking,' the idea of doing an action or pointing something out, a direction, is one way to look at it. This focuses on the way the chosen actions point something out and therefore directs us to something existing: the scratch marks the door. Nowadays this relationship can be approached in a more complex way. There are many more questions to be asked. It is the material of the door that influences the shape of the scratch? The scratched door will influence its surrounding. With the question of scratching a door – or not – and the awareness of what impact the scratch might have, it is no longer a question of directing. It always somewhere in between designing or being designed by. So this is an issue of influencing the other, but no longer in a relationship that is just reactive: it is contextual. Everything design does alters the context and as such the design itself is altered again by its context.

Nothing is ever separate from the other – and in design this interrelatedness is especially important. It might be what defines the design. It is always related to direction, flow, idea, form, action and change. I would describe design as: taking part. Or being a part of. To 'take' part is not to keep a part for the self, to own, but to become part of the flow of things, movement and time related to a larger scale. Like the butterfly causing a hurricane on the other side of the world. Or pollination. And this relationship, this idea of 'everything is connected' is profound. It is hard to oversee, to map, because you can't oversee everything at once. It might be easier to grasp if we think about fighting hurricanes instead of the actions of butterflies.

The mystery between the butterfly and the hurricane is impossible to describe or predict. But is that reason not to approach it, connect

34 **Actor Network Theory or ANT** is a constructivist approach to social theory developed by Michel Callon, Bruno Latour and John Law. The approach counts all social and natural realms as shifting networks of relationships. ANT argues that those relationships are the dimension in which everything exists. To approach a phenomena, we must take in account that all parts of the situation play a role in interacting and setting up the situation. Also objects, ideas, non-humans, processes, expectations and more play a role in the social understanding of a situation. It helps to look at a situation in a wider frame of actors than the human. It is especially interesting how animals, processes, humans and objects gain equal treatment. Read: *Reassembling the Social: An Introduction to Actor-Network-Theory* (Latour, 2005).

to it, respect it or try to witness it? Or to learn how to cope with that unpredictability? Design is more than having an idea, then collecting ways to realize it and ultimately shape it as the parameters demand. It is about the way those parts influence each other simultaneously. In this way, all needs, problems and solutions are likely to have touched each other. Design as 'taking part' means approaching butterflies and hurricanes simultaneously. If we are not concerned with these urgencies in the world, even though they might feel too difficult, if we can do something about them in our work but choose not to, morally it might be just the same as participating against them.

Design is not an abstraction, but in recent decades it has been strongly connected to technology and technocratic approaches. With the Anthropocene, we search for a paradigm shift where *sympoiesis*³⁵ of the digital area, interaction, an idea of the holistic, biotechnology, immaterial culture and experience are in the foreground, where there is an awareness, an embodied individuality, a multi-disciplinarity, a partnership with design.

CONCLUSION : UNFOLDING TOGETHER

A plea for a non-hierarchical approach to complex problems

It has become evident in research and design that academics and practitioners are often making things 'too easy on themselves' by creating sterile environments. Sterile laboratories lead to consistent and precise

results. But not all problems can be approached in this environment: isolated simulations give isolated answers. Some questions are so complex they cannot be isolated. Instead of trying to simplify the question, the researcher could choose to 'live the question,' map the journey and eventually learn from experience entangled with the specific and complex context. There is no single perspective. There is no one reality, or answer. This thesis accepts the never-ending multiplicity of realities; an ontology of speculative realism.

In terms of problems that need a 'holistic approach,' often out of urgency, grounded research can be a new way to familiarize ourselves with complex understanding, as well as with responsibility in urgent times. By urgent times we mean actual situations of environmental problems caused by the collective actions of our existence. It addresses an idea of wholeness that is led by an urgency for survival, that forces us to break boundaries between redundant dualisms such as city and landscape, human and nature and various disciplines. A fresh appreciation of 18th-century Romanticism, but this time related to environmental problems, while the self gently communicates with the unseen.

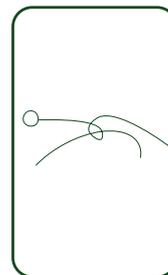
Research and design are entangled with their context and therefore cannot have the mission of controlling and focusing on the endgame by dominating the problem. Rather, they should play a role in the shared struggle of living together – a question that demands a new kind of engagement. We cannot fill a clear gap. This gap will always be blank: there is no absolute answer to uncertainty and complexity – it is our attitude towards it that counts. We have to take a responsive, changing path to imagine multiple temporalities, to unlearn, or rather to disentangle ourselves from fixed ideas of how the journey will be.

Within this detour, however, it is important to

35 *Sympoiesis* is Donna Haraway's replacement of the term autopoiesis coined by the Chilean biologists Maturana and Varela. Auto meaning 'self' and in Haraway's argument nothing makes itself: everything is a dance together. Maturana and Varela do not state this, however Haraway points out that nothing is individual but shaped simultaneously by its context. Chapter 3 of *Staying with the Trouble: Making Kin in the Chthulucene* - Haraway (2016).

have a mission, direction, purpose. The voice of the self is vital, particularly when adopting a non-disciplinary approach. While the voice of the designer is entangled, and an openness to new ideas, images and experiences is vital for the creative industries, it also needs to be handled with care: the intuitive voices of designers are easily influenced. Designers need to be aware that their environment, experiences, memories and education change their voices. By acknowledging this entanglement, an inner compass can become more visible. We need this awakened compass to approach complexity. Taking a position in the struggle of living together leads to drawing together, unfolding together. When meaning is clear, there is no reason to stay within one discipline, such as the arts, science, engineering or design. All realms become open.

The challenge is not about thinking of the end. Without the end result in mind, but rather staying open until the end, research and design can, during this fuzzy process, integrate with complex problems. Problem and solution co-evolve. The lack of hierarchy in information is an opportunity: without this hierarchy it is a matter of experience, research, stance, idea and design; **unfolding together.**



ENTANGLE

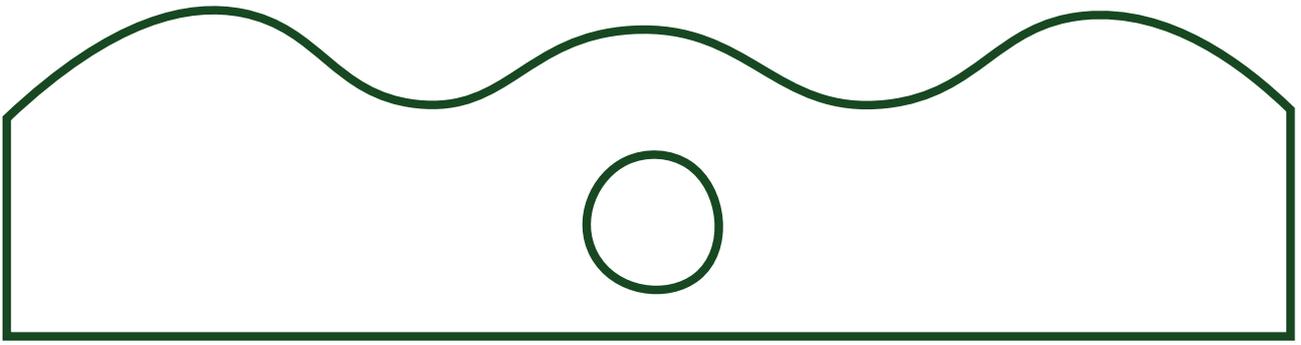
no need
to make a
decision yet,
decisions are
also just ideas

instead of
dualisms,
look at
balances,
nuances
in between
them

be kind to
subjectivity -
it's a source

find
patience to
let problem
and solution
unfold
simultaneously

approach
complexity
with honesty
rather
than with
confidence



ondergedompeld
submerso
submerge

verb

1 the U-boat would have had time to submerge: go under water, dive, sink, plunge, plummet, drop, go down. ANTONYMS surface

2 half submerge the bowl in a large saucepan of hot water: immerse, dip, plunge, duck, dunk, sink.

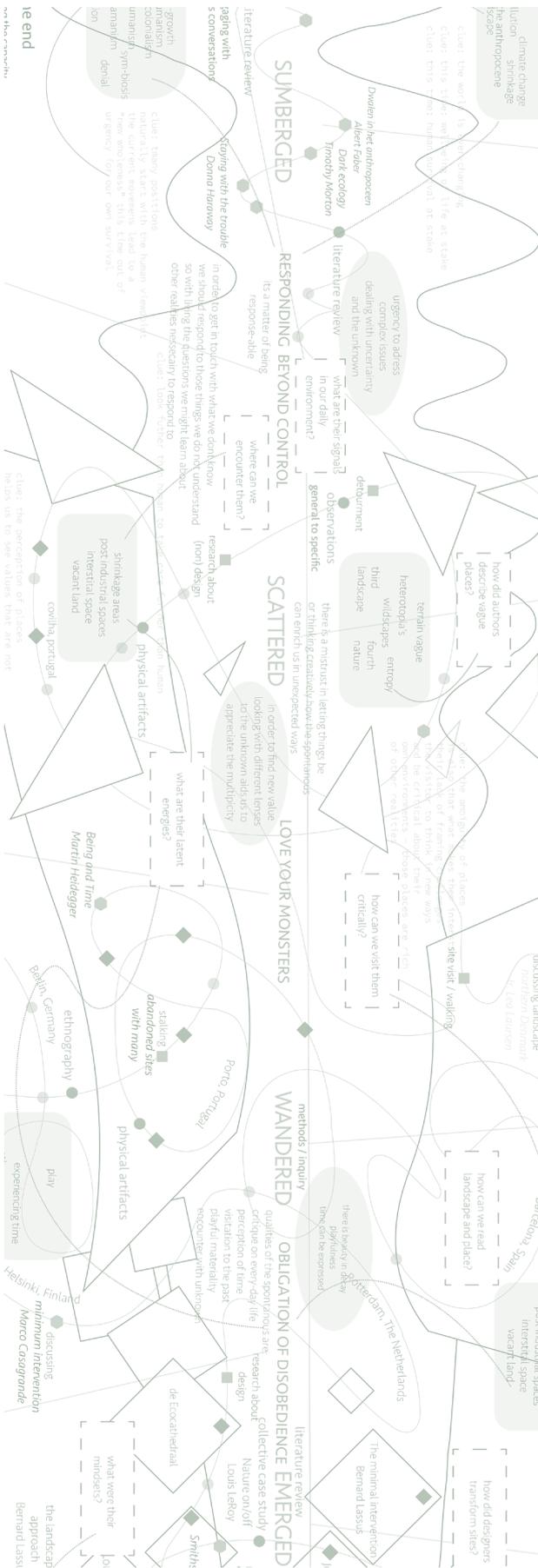
3 when the farmland was submerged many sheep were lost: flood, inundate, deluge, engulf, swamp, immerse, drown; overflow, pour over.

4 I've been completely submerged in work for the past two months: overwhelm, inundate, deluge, swamp, bury, engulf, swallow up, consume, snow under, overload, overburden.

5 a healthy return to old values which had been submerged: hide, conceal, veil, cloak, repress, suppress.

(Waite, 2009).

mosaic 2: SUBMERGED accepting wicked problems



4.1 SURRENDER TO COMPLEXITY

This chapter is a plea for experimentation and comfort with failure. The challenge is to act without knowing the outcome, daring to dive into the unknown, taking risks.

The research journey through the unfolding of experience, literature, ideas and designs, all at the same time comes with a particular experience: being overwhelmed or 'submerged' in multiplicity. How can we address the most urgent and relevant problems if they are beyond control? Is the individual not irrelevant when compared to complexity? One thing is clear: addressing these problems in their complexity, without simplifying them, remains relevant and urgent.

As a focus for my research, one single problem would have seemed insignificant, while involving many problems seemed overwhelming. There is a shift in attention from describing the reaction to a single problem to the matter of reacting: from 'what' to 'why and how.' This chapter explains urgent/'giant' problems and what kind of positions we can take. For this, I look at existing voices that all advocate a different attitude towards complexity.

In this general 'research for design' approach, I have looked at research into what 'beyond control' means and examples of attitudes. The Anthropocene could work as an umbrella term: a tool to frame a new story about the world to address new implications. This term is used as a background against which to address urgency, complexity and responsibility at a time when humankind becomes aware of its irreversible effect on the world. This leads to the search for a new wholeness based on the awkward realization that we are dependent on the world – and thus on our own collective actions.

This chapter makes the argument that in order to stay in touch with what we don't know or can't control, we have to keep responding to things we do not understand by 'living the question.' We can let in other realities. More than resolving and understanding those realities, we have to become practised in our ability to respond to the role of activism in research and design, a matter of being response-able: response-ability beyond control.

When practitioners are unaware of their frames for roles or problems, they do not feel the need to choose between them. They do not analyse the ways they construct the reality in which they function; for them, it is simply the given reality. When a practitioner becomes aware of their frames, they also become aware of the possibility of alternative ways of framing the reality of their practice (Schön, 1995, p.310).

4.2 DROWNING

Challenging a problem 'too big' can feel like swimming, almost drowning, not knowing how to grasp, orientate, react or respond, let alone initiate. To submerge is to dive, plunge, go underwater. It refers to the state of being inundated, overwhelmed, immersed and cloaked. Letting go, yielding to this reality, is the first stage of becoming *noise-wise*³⁶ – by literally plunging into the noise, trusting that patterns will emerge. A noise-wise skill is needed for researching as much as being able to approach the complexity of contemporary spatial questions. Within this sea of emergency, where do we start?

36 *Noise-wise*. The wisdom to find a direction in a world full of distractions, bulks of information. I lend this word from the doctoral forum UD17: NOISE-WISE, open to all PhD students. The conference was organised by PhD students from the PhD Design programme.

The urban landscape in Europe is becoming vast. The underlying landscape is threatened with losing its meaning through the impact of the Anthropocene. The power and facilities of this area cover great economic, technological, cultural, logistic, politic and scientific ground, meaning that this area is of great global significance. But with the development of the urban area, the underlying natural and cultural landscapes are blending. Because the environment and its users are influencing each other, this change has a direct impact on the human condition. They have become disentangled, fragmented elements where the sense of place is affected. The orientation and memory of the place do not correspond to our regular understanding: places are seen as non-places.

In many texts relating to the Anthropocene, we find doom scenarios, telling us the end is near (Buell, 2016). I do not want to use the Anthropocene to talk about the apocalypse. I am not hopeful so much as courageous and optimistic. Being hopeful means relying on something else, that things will be all right. Having an attitude of courage towards the future means we start thinking actively.

But first: what is going on in the world? Can we stop and think, act accordingly? Pollution, global warming, extinction, animal cruelty and all the other things caused by human activity.

These are not addressed as things to be solved one at a time: it is the situation today, and it doesn't seem that tomorrow is likely to change soon. Problems are best solved by looking at their cause, not by treating their symptoms. Strapping the bandage quickly does not mean ignoring the fact that human life is causing problems for social and ecological wellbeing, which will ultimately threaten the resilience of living communities on planet Earth.

Fig. 12 Ophelia This is the drowning Ophelia from Shakespeare's play Hamlet. Picking flowers she slips and falls into a stream. Mad with grief after her father's murder by Hamlet, her lover, she allows herself to die. The flowers she holds are symbolic: the poppy means death, daisies innocence and pansies love in vain.



How do we deal with the IDEALS ↔
 UNIVERSITY helps you to SHAPE IDEAS
 WHAT IS SUSTAINABLE anymore
 "I DON'T KNOW ANYMORE"
 "I WISH I HAD TIME TO RESEARCH"
 "THE BIGGER PICTURE"
 "THINGS ARE INEVITABLE"
 "WHY NOT WORK WITH IT"
 "LET'S THINK. THE RESEARCH IS IMPORTANT!" "THEN YOU HAVE TO STUDY SOMETHING ELSE" INFORMING YOURSELF.
 HOLISTIC VIEW. REALITY CHECK
 HOW TO KEEP AN OPEN MIND
 ...



Fig. 13 Pollution as new geological layer.
 An image of a landfill in the documentary "Anthropocene: The Human Epoch." Credit... Edward Burtynsky/Kino



Fig. 14 United Nations Sustainable Development Goals. In September 2015, world leaders met at the United Nations for a historic summit to agree the Sustainable Development Goals. The goals apply to all nations and create a framework to end poverty and develop economically within planetary boundaries. A tool, representing hope, but how to guard motives?



Fig. 15 Narcissus. Obsessed with his own image. Narcissus is the origin of the term narcissism, a fixation with oneself and one's physical appearance or public perception.

Because they are caused by human existence, they can be described as characteristics of the 'Anthropocene'— our day-to-day lives and ways of practising modern day values have resulted in a collective moulding of the world's inherent systems.

4.3 THE ANTHROPOCENE

In Nature magazine, geographer Simon Lewis and geologist Mark Maslin refer to 1610 as the absolute start of the Anthropocene (S. Lewis & Maslin, 2015). They argue that the Anthropocene is related to the discoveries and the first wave of globalization. Most others, however, see the start of the Anthropocene as coming later, around the Industrial Revolution, with population growth, industrialization and the use of fossil fuel, in around 1800. Other indicators include the erosion of sediment, large-scale building projects, acidification and fertilization of the seas, melting ice in the Arctic, rising global temperatures and the mass extinction of species (Fig. 16 and 17)

The most logical and urgent reason to care for the world's wellbeing is our own survival. It emerges that our own life is actually dependent on the environment, that we are, in fact, entangled. This is something we can be sure of, so let's start there. The debates around the notion of this realisation are shaking our socio-economic values, generating discussion about the way we use energy, travel, consume: live. They might even reveal the discrepancies of today's values. Values, however, are not just decided by one group of people, and then implemented by everyone else.

Values are part of a collective human network of everyday practices and traditional thinking that do not change easily. In fact, it is possible that many values that characterise certain cultures stem from historical events. Pollution, water,

droughts, rising water level, forest fires, micro-plastics, decreasing biodiversity, parts of the ocean without air, sea mammals becoming deaf from undersea noise, mega-droughts, melting ice caps... Our planetary boundaries have been affected or crossed over on many levels (Fig. 18).

We strive for certain values, which are wellbeing and autonomy for all life, which is equal and inclusive. The way this quest for wellbeing is defined is set out in the 'sustainable development goals' provided by the *United Nations*³⁷. How can a designer/intervener make sense of the *Sustainable Development goals*? (Fig. 14). And these problems will most likely be answered with capitalist-shaped ways of thinking, in which values relating to unlimited growth and the idea of freedom are entangled. Many practices tick the boxes of these sustainable goals to sell their products – and this is not the goal. As a working practitioner, the danger lies in fighting for values with means that set other values in motion.

If developing countries answer those problems with the examples they see in the developed world, given that they have less time and fewer resources to go further, they seek to adapt their worlds to the capitalist system, which they see as a world of prosperity. But the system of ownership, time and expansion that was suited to the industrial era is flawed: the philosophy of unlimited expansion does not make sense if there is a *limit to growth*³⁸. When we think of

37 *United Nations*. In September 2015, world leaders met at the United Nations for a historic summit to agree the Sustainable Development Goals. The goals apply to all nations and create a framework to end poverty and develop economically within planetary boundaries.

38 *The Limits to Growth*; A Report for the Club of Rome's Project on the Predicament of Mankind (1972). The group of scientist already investigated the relationship between the limits of the Earth system and the influence of human actions and noted the urge for social and economic stability, not growth. The Club of Rome has generally provided comprehensive updates to the book every five years.

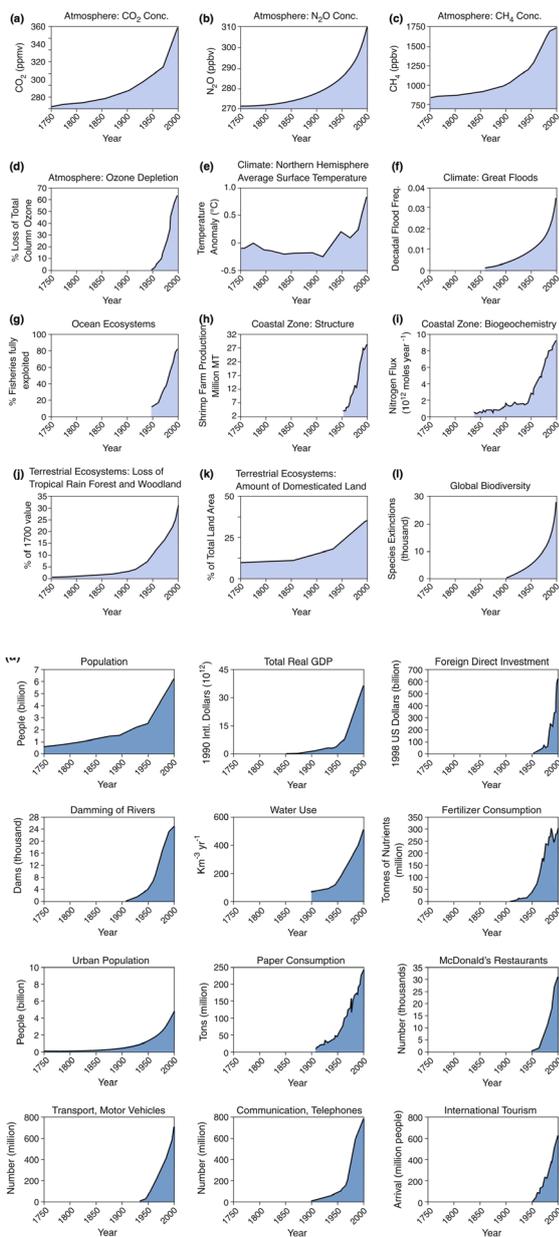


Fig. 17 The great acceleration. Human activity, predominantly the global economic system, is now the prime driver of change in the Earth System — the sum of our planet’s interacting physical, chemical, biological and human processes. This is the conclusion made visible in a set of 24 global indicators, or a “planetary dashboard”, charting the “Great Acceleration” in human activity from the start of the industrial revolution in 1750 to 2010, and the subsequent changes in the Earth System – e.g. greenhouse gas levels, ocean acidification, deforestation and biodiversity deterioration. The post-1950 acceleration of the human imprint on the Earth System, particularly the 12 graphs that show changes in Earth System structure and functioning, have played a central role in the discussion around the formalisation of the Anthropocene as the next epoch in Earth history (Anthropocene Review, 2015).

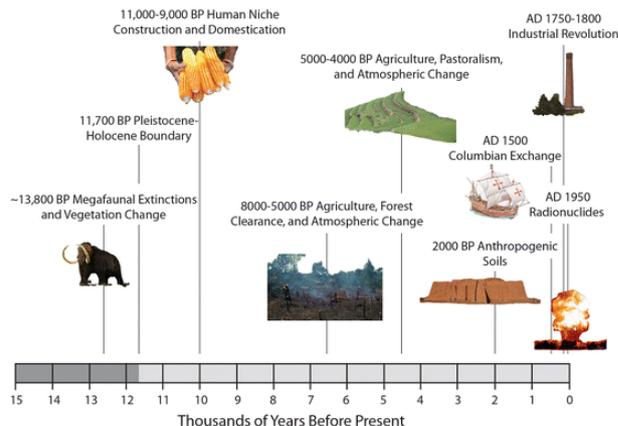


Fig. 16 The start of the Anthropocene Epoch. Selection of possible beginnings of the Anthropocene. A sampling of some of the proposed temporal boundaries for the Holocene–Anthropocene boundary. Dates are reported as calibrated years before present (Braje, 2015).

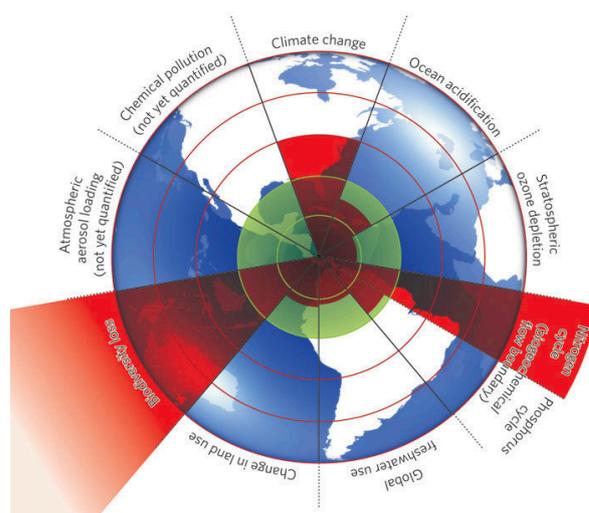


Fig. 18 The Planetary Boundaries concept identifies nine global priorities relating to human-induced changes to the environment. The science shows that these nine processes and systems regulate the stability and resilience of the Earth System — the interactions of land, ocean, atmosphere and life that together provide conditions upon which our societies depend. Four of nine planetary boundaries have now been crossed as a result of human activity: climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen). Two of these, climate change and biosphere integrity, are what the scientists call “core boundaries”. Significantly altering either of these core boundaries would drive the Earth System into a new state (Stockholm Resilience Centre, 2015. Planetary Boundaries Legend).

a post-industrial era, its qualities and the new socio-ecological balances of the city, we could adapt those properties to capitalist philosophy as well. When time was standardised across nations, to make workers and trains arrive on time, land and labour could be owned and growth equalled progress, but maybe in a post-capitalist approach, time involves a complex ecology of relations; the idea of ownership prompts discussion of inherent localities and common property and the idea of growth and development is sought in less material ways. During a scientific conference in Mexico (1999), Dutch-Swedish chemist and Nobel prize winner Paul Crutzen³⁹ coined the term -

- Anthropocene, the Human Era. Because he had scientific credibility, his statement was taken seriously (S. L. Lewis & Maslin, 2018). Others have used the term: Andy Revkin (1956), Eugene Stoermer (1934-2012) and, even earlier, Aleksei Pavlov (1854-1929) and Vladimir Vernadsky (1863-1945). It is only recently that the term Anthropocene has become very popular, because we have a clearer notion of the human influence on earth, the more visible symptoms of climate change, the plastic soup in the ocean and species extinction. As has always been the case, people's motivations are different: sometimes caring about these issues is an overused 'green-washing' of ideas, some just follow what is trending.

Albert Faber gives us an overview of three possible starting points for the Anthropocene: the first time humankind used fire (1.5 million years ago); the mass extinction of *megafauna*⁴⁰,

which correlated with the continents being populated by humans (between 50,000 and 10,000 years ago); or the introduction of agriculture in Mesopotamia (11,000 years ago) or China and Central America (6,000 to 7,000 years ago (Faber, 2018).

There was a time when there were only 5 million humans – impossible to imagine nowadays⁴¹ (Harari, 2011). 50 years ago, the population of the earth was half what it is now. We as humans contain a fifth of the total amount of biomass on earth (550-560 organically bound carbon). The group responsible for recognizing the Anthropocene suggests a rapid acceleration in around 1915. Other proposals indicate 5 to 8 thousand years ago and are related to agriculture. Another interpretation is the old world / new world collision in 1600, which is sometimes taken as the beginning of the Anthropocene because of the exchange of species and goods. At this time, colonists greatly altered the new world, killing species and bringing crops and diseases.

4.4 PERMANENT CHANGE

Ice ages come and go, volcanoes erupt: nature is dynamic. Life evolves, extinguishes and relocates constantly. Life is always changing, but its speed is so quick that geological time scales, entropy and ecological regenerative systems cannot always keep up. Places have been altered to show and produce a modern form of existence, a way of thinking. Half of the earth's population lives in the city and this percentage is only increasing. Cities are flooded with new residents

39 **Paul Crutzen.** In the seventies, he looked at the impact humans have on Earth's atmosphere, especially the ozone layer, and it was for this work that he received the Nobel prize in 1995. He is known for work on climate change research and for popularizing the term Anthropocene.

40 **Megafauna,** worth to mention, are large animals. Since they are big, they play an important role in the transport of minerals and seeds over long distances.

As well, due to their size, they play an important role in creating pathways through forests and keeping land open, resulting in more habitat diversity, possibilities for different species to dwell

41 **World population** began accelerating about 10 000 to 12 000 years ago and has exploded in the past 1 000 years UNEP-GRID Sioux Falls, population data US Census Bureau 2011.

and visitors at such speed that it can be noticed in everyday life. Books are full of the problems and meaning of urban life, life in the city. The other end of the scale seems neglected: what did those who moved to the city leave behind?

For example, in a small country such as the Netherlands, 80% of the shrinking areas are located in a rural region. For many, the idea of living in a shrinking town is not exactly linked to a positive narrative. One of the most significant problems seems to be merely a case of perception: a lack of motivation, hopelessness and sadness. Research into two entirely different Walser valleys looked at local residents' perception of the abandoned heritage. It was found to be largely the educated class that aims to conserve the relics of the past, as people of this class often see themselves as knowledge keepers. Looking at the problem of shrinkage, there are too many relics of the past. Knowledge is maintained by taking care of relics. The decision of what to keep and what to let go is largely dependent on a subjective value system (Bamert, Ströbele, & Buchecker, 2016).

Visiting the Portuguese countryside, it becomes clear that the stigma of abandoned infrastructures impacts the experience of the place: the idea of leftover spaces 'that no one wants' feeds the sense of abandonment. Not only are the houses abandoned, but the people living there feel abandoned too. Globally, cities are expected to continue growing. For many, extension and growth is a positive idea but one with consequences. Many cities and rural areas in the industrialized world have been decreasing in population, whole countries are entering a demographic stage of total population decline rather than growth. Eurostat (Wolff, 2010) predicts that – without future inward migration – the EU will have lost 50 million of its inhabitants by around the year 2050. In Portugal, Spain, Italy and Denmark, many villages no longer have a shop, pub or post office, while more and more houses and public

buildings are neglected. The de-industrialization of cities and up-scaling of industries in rural areas result in massive areas of abandoned landscapes, and the reconfiguration of the job market resulting in unemployment forces hordes of people to migrate.

A village without derelict buildings would be considered a normal village. Beyond the perception of leftover spaces, decreasing social circles or lack of resources, it is the sum of these developments that notably impacts the notion of the landscape. The century-old agricultural fields in Vale do Mondego, Portugal, have been tended by generations of farmers. They cleared the fields of combustible materials such as dried leaves and branches, preventing fire from spreading to their properties.

As a result of depopulation, a large number of these fields are now left without management or social surveillance, which decreases the perception of their beauty, their ability to hold water as a buffer and their resistance against forest fire. Portugal is the European country most affected by vegetation fires, with the highest risk in the center, north and extreme south (Algarve) of Portugal. Not only have recent weather extremes heightened the likelihood of fires: more than half of the forest fires in Portugal are started on purpose.

4.5 THINKING BEYOND GROWTH

In Denmark, where I stayed for a couple of months in the fall of 2018, there is a shrinkage problem as well. Although completely different, buildings that had been left for only a couple of years were already regarded as ruins. Municipalities could apply for a government fund to demolish places that were abandoned. This would prevent the negative impact of such places and also increase the value of the land.

However, I think this is an erasure of the urban fabric and history, or *genius loci*⁴² of the place. It might not be a sustainable solution. Lea Laursen and I visited a new house being built next to one that had recently been demolished because of its neglect. Shrinkage is becoming a structural problem in the Western world. Demographic trends indicate a long-term decline in population and employment all over Europe, especially in rural areas and smaller towns, but also in parts of larger cities (Tietjen & Jørgensen, 2016).

The decline of population heterogeneity can lead to the death of social life and a lively public sphere, which constitutes the main source of creativity and innovation, and creates a cultural void. It doesn't seem to be the case that the idea of living in a shrinking city is linked to a positive narrative. The real problem of shrinking areas seems to be a lack of motivation, hopelessness and sadness. Considering the lack of employment, services, management and social surveillance it is understandable that existing approaches towards shrinkage focus on growth. However, in tackling this issue, a recent perspective is that shrinkage should be treated as equal to the concept of growth. Growth is not a synonym for development. Instead of looking for planning for growth, or planning for shrinkage, the new paradigm should be to plan for progress. Instead of attempting

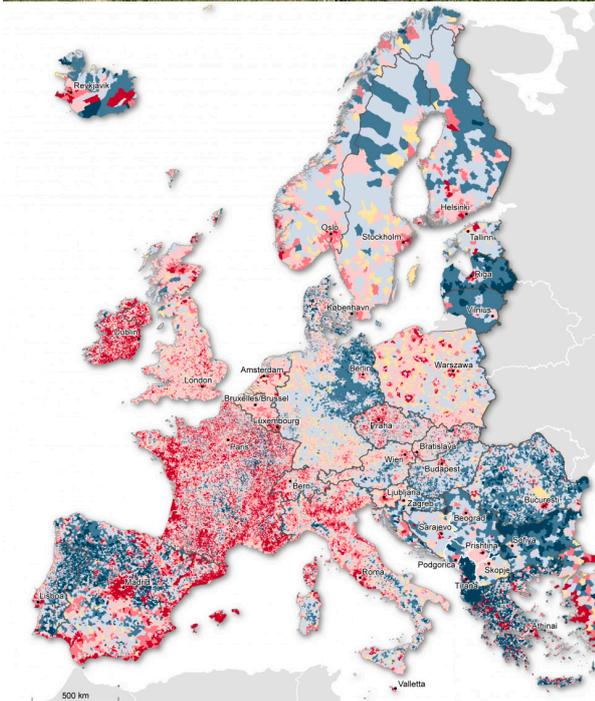
42 **Genius loci.** Latin term meaning 'the genius of the place', referring to the presiding deity or spirit. Every place has its own unique qualities, not only in terms of its physical makeup, but of how it is perceived, so it ought to be (but far too often is not) the responsibilities of the architect or landscape-designer to be sensitive to those unique qualities, to enhance them rather than to destroy them. Alexander Pope, in Epistle IV (1731) of his Moral Essays, addressed to Lord Burlington, states in his Argument that, 'instanced in architecture and gardening,... all must be adapted to the genius of the place, and... beauties not forced into it, but resulting from it'. Batey (1999); Goulty (1991); Norberg-Schulz (1980a).

A Dictionary of Architecture and Landscape Architecture. Retrieved August 11, 2020 from Encyclopedia.com: <https://www.encyclopedia.com/education/dictionaries-thesauruses-pictures-and-press-releases/genius-loci>

to stimulate growth, which is called reaction in planning, adaptation seeks to optimize the consequences of shrinkage, rather than to end them. A phenomenon like shrinkage has the characteristics of a wicked problem. It is hard to design for, or to find a single general strategy, since every local situation represents a unique, complex and contested social situation, which changes inconstantly because of many, multi-scalar factors. This results in another factor that favors adopting an adaptive, participative and trans-disciplinary approach. It is another example of complexity (Tietjen & Jørgensen, 2016). In the discussion on population shrinkage, we see that researchers and designers do not only try to fight, ignore or destroy the negatively perceived consequences of decay and shrinkage: some attempt to see shrinkage as part of growth, and try to work with the perceived qualities at hand. This positive strategy acquires a certain attitude, which is the vital core for designers of the future. Growth goes hand in hand with decay. Should we see someone who has become old and wise as decayed or should we see this person as grown?

Urban planners and scholars S. Sousa and P. Pinho explain a paradigm shift in planning and design, which treats decline as equal to growth. Reaction in planning tries to reverse the process of shrinkage, while adaptation seeks 'to adapt to/optimize the consequences, rather than to end it.' The difficulties are mostly caused by the strong link between planning, development and growth, leading to the idea that decline is a threat or taboo: '*Planning should be flexible enough to adapt. Unfortunately, so far, it is not quite there.*' (Sousa & Pinho, 2015). In the face of a '*degrowth society*⁴³,' autonomy is the keyword

43 **Degrowth.** Degrowth is a social, political and economic movement that critiques the paradigm of economic growth. Part of a theory of Anti-consumerism, that is concerned about the depletion of resources and ecological footprint that productivism causes. Degrowth can be linked to the Arts and Crafts movement (1819-



Average annual population development 2001-2011* in % in Local Administrative Units

Dark Blue	up to below -2.0	Light Red	0.1 up to below 1.0
Medium Blue	-2.0 up to below -1.0	Yellow	-0.1 up to below +0.1
Light Blue	-1.0 up to below -0.1	Red	1.0 up to below 2.0
White	-	Dark Red	2.0 and more
Grey	-	Grey	no data

Fig. 20 Map of population change from 2001-2011. (BBSR Bonn 2015).



Fig. 19 Abandoned buildings. Several locations in shrinkage areas visited. Jutland, Denmark (a); Volongo, Portugal (b); Craco, South Italy (c); Serra da Pena, Interior Portugal (d)

(Latouche, 2016, p.92).

4.6 THE SOCIETY OF EXPANSION

'The bankruptcy of Dubai and its unoccupied 800-meter tower represents a symbol of the failure of the American dream and its urbanism. The productivity city belongs to the past, but the destruction of the world that it has generated follows on'

(Latouche, 2016, p.91).

Wiechmann conceptualizes the shrinkage pattern of Europe as 'islands of growth in a sea of shrinkage' and that '*without targeted action, many local and regional governments are unlikely to gain control over the socio-economic and physical decline of an ever-increasing number of urban settlements*' (T. Wiechmann in: Haase, Hospers, Pekelsma, & Rink, 2012, p.40). Causes of shrinkage include: suburbanization, industrial transformation, selective collapses and political strategies. In Portugal, we see villages without shops, cafés or functioning town centers: houses, factories and public buildings are left derelict. The deindustrialization of cities gives rise to massive amounts of abandoned landscapes and unemployment, forcing hordes of people to migrate. Shrinkage is perceived negatively: 'a lack of motivation, hopelessness and sadness' (Loures & Panagopoulos, 2007), while wild green space in cities can create a sense of unease and insecurity (Rall & Haase, 2011). *'That ... the*

visions of merely fifty years ago, should now be in ruins is frightening, possibly explaining why they are being erased so quickly in growing cities' (DeSilvey & Edensor, 2013, pp. 117).

Ever-multiplying traces of our predecessors shape our environment more and more: the Anthropocene era. We cannot afford to think that degraded sites can all be transformed for spectacle, hidden or just ignored: their scale makes it impossible, complex and wicked to engage with these sites and their contexts, either due to lack of investment or insufficient knowledge about how to approach these sites. We cannot help but redevelop according to investors' expectations or those of the regional or central government.

4.7 THE NEED FOR OTHER ATTITUDES

Often only a selection of abandoned buildings is taken care of: others are forgotten, denied or destroyed. This borderline obsession with preservation only emerged in the late nineteenth century (Holtorf, 2012). During the Romantic period, the narrative impact inspired by classic and medieval ruins was valued, as we can see in works like Italian artist Piranesi's drawings of ruination or the ruined follies built in English landscape gardens. This attitude needs to be re-interpreted, however, as more than a quest for aesthetics, or a 'dirty realism' for architecture (Buford, 1983), but approached as an ethical issue to facilitate necessary responses to the consequences of the rapid growth around the world, where 'the other' (Foucault, 2008) can be embraced without *reterritorializing / deterritorializing*⁴⁴ the meaning of place

1900) since it is an anti-industrialist response. As well it can be linked to the Club of Rome and their report *The Limits to Growth* (1972). A leading figure in this movement is Serge Latouche, a professor of economics. The book *Small is Beautiful* (1973) from E.F.Schumacher we can already find a critique to the neo-liberal model of economic development (Kallis, et al., 2018).

44 ***Reterritorialization / Deterritorialization.*** Deleuze and Guattari's *Capitalism and Schizophrenia* (1972-1980). As I interpreted it, the terms mean the manner in which place is reformed to constitute power or abandoned. Without thinking about or being mindful to the other, which in this case it that what is transformed

(Deleuze, 2004) by a dominating species.

Nevertheless, western capitalist society, lifestyle, culture and economy focus on growth and expansion. More than 150 years ago, Karl Marx stated that the development and expansion of society doesn't mean the improvement of wellbeing. Often the opposite happens for the masses. The oppression of and tension between those with less capital and those with more is a narrative that has been repeated many times throughout history (Carey & Harvey, 1975; S. L. Lewis & Maslin, 2018; Marx, 2000). Hegel and Feuerbach called the negative effects of this polarisation 'social alienation'. Residents are constantly controlled by actions, dominant 'territorialization' of the past.

As discussed, the urban landscape is becoming vast. The underlying natural and cultural landscape is under threat of becoming unreachable through the impact of the Anthropocene. What used to be outside the city is now losing its role as such: it becomes harder and harder to distinguish the boundaries, what impacts the balance and dynamic of power in spaces. The problems can no longer be hidden.

Projects can transform places from those that represent fear of death and loneliness into places that represent a love for life and co-existence and vice versa. In Chapter 8 'Inter-digested' we explore the idea of this place as 'the garden of love': a territory about difference. On the one hand to see the qualities of such places, on the other hand to overcome differences and finally to understand a response of togetherness.

The initial idea for this thesis was to investigate

/ abandoned to constitute power places become scarred in their meaning, since it degrades them to a container of power, instead of a layout that hosts a multitude of ever-changing complexities.

small interventions that involve people and existing flows: to think how design can address a large-scale problem on a micro-scale. In the context of shrinking places, it was found that local physical projects and collaborative decision-making seem to be the main factors in achieving successful results (Tietjen & Jørgensen, 2016). Successful, in those projects, meant that the spaces were improving human wellbeing. Because it addresses a pinpointed and site-specific network of re-framing small scale problematics, I have chosen to align this idea with the concept of minimal intervention. Regional design strategies concerning those matters, combined with local physical projects, can provide insight into a possible new perspective on carrying out interventions: thinking about the micro-scale while approaching a vision for the macro.

Encompassing the idea of economic, social, political, ecological and spatial problematics in Europe, the Anthropocene can be used as a term to imagine new directions, as it changes the way we can tell the story of humanity. It is a word with which to address the causes of contemporary environmental symptoms, symptoms that indicate a new story. There is a multiplicity of terms with which the Anthropocene can be described, while the word itself allows us to broaden and compare our research to other fields of understanding and imagination. A large body of books, magazines, literature and art can be linked to the term Anthropocene and gives us a rich body of knowledge from which to choose.

4.8 CRUTZEN'S MESSAGES

The disciplines that those sources represent are philosophy, social sciences, earth system sciences, arts, architecture, ecology, geology and design. This is also a dangerous position to take – the term Anthropocene can be easily misused

as a tool, motivation or buzzword.

The exact date or the buzz-word potential is not even all that important, it is the response that count. The exact date can be used to explain different political benefits. The key issue of the Anthropocene, however, is not only how the term can be interpreted: the consequence of naming this global phenomenon is what really counts, as it implies, we might say, a new story that we can tell about ourselves in the world: a new attitude for a new reality.

The term Anthropocene invites actors other than humans into the discussion and is thus already overwhelming, an impossible task to convert it into facts. It might well be crisis that induces post-science thinking, a critique on post-modernism, and forces us to rethink relationships and collaborations between all life on earth from a companionship perspective, Haraway's '*critters*'⁴⁵. Using the term Anthropocene, Paul Crutzen spoke about a new way to look at the problems of today (Crutzen, 2006). With the notion of a sense of urgency, the barrier between human culture and 'the other,' or nature, is breaking down (Rockström et al., 2009; Steffen, Crutzen, & McNeill, 2007; Steffen et al., 2016, 2011).

The word critter is in its place: there is no 'us and them' anymore: there is only us. I would say that the clans of nature culture are falling apart. A popular image we can use is the film 'The Truman Show' from 1998, where the main character discovers that his world is not what he thought it was. With this new narrative of the human in the world, the end of the endless resources of nature, it becomes clear that:

⁴⁵ *Critters*. The word, meaning 'creature' is used thoroughly in Ecofeminist scholar Donna Haraway's 'Staying with the trouble'. She uses a unifying word for all living beings on Earth- from singular cells, to plants, animals and humans, even to cyborgs (Haraway, 2016).

- From generation to generation the effect of human activities is accumulating and even accelerating;

- Humankind will remain a major environmental force in the future. A daunting task lies ahead to guide society towards environmentally sustainable management. This will require a sensitivity to values on all scales;

- Living in the Anthropocene means building a culture that grows with Earth's biological wealth instead of depleting it. In this new era, nature becomes us. It does not make sense to calculate the economic possibility of becoming sustainable: it is the only way to sustain the economic situation in the first place.

Meaning, the term Anthropocene gives us a new story about what humans are doing to the world, and what it means to be human, from destroyers to saviors.

It is clear that the familiar contrast between society, technology and the natural world is fading. Talking about the Anthropocene means that there is an awareness that nature does not stand apart from the human.

4.9 TOWARDS ONE-NESS

One could call the Anthropocene an anthropocentric, or even narcissistic, approach to the world. In *Metamorphoses* by Ovid, Narcissus fell in love with his own image in the bloom of youth – not realizing it was merely his own reflection. Absorbed by his own image, Narcissus (paying no attention to the nymph Echo who was in love with him) eventually turned into a white and golden flower as punishment (Anderson, 1997).

The notion of the Anthropocene does not necessarily make us the most important, or a

focal point for admiration. Instead, it can be seen as an attitude of suspicion. This fascination with our images comes from a deep insecurity of the self: our sense of self starts to become unclear, and the obsession is an attempt to grasp its meaning. It presents us with a dilemma: who is this 'Anthropos' who causes the Anthropocene? The myth can work as a realization that we must look up, or see our own reflection in the context, influenced by the mirror. It is therefore an opportunity both to learn about the other and to look critically at ourselves – to look at the otherness within ourselves, while looking at the 'us' in the other.

*The Gaia hypothesis*⁴⁶, also known as the Gaia theory or the Gaia principle, proposes that living organisms interact with their inorganic surroundings on Earth to form a synergistic, self-regulating and complex system that helps maintain and perpetuate the conditions for life on the planet. Lovelock describes Gaia, the Ancient Greek word for mother nature, as a system for the earth that regulates itself, like the thermostat of an oven. As an inventor himself, he says it is easy for him to think of a self-regulating system. But to explain it is very difficult.

Gaia is just like such an invention, hard to describe (J. E. Lovelock, 1990; J. E. Lovelock & Margulis, 1974; J. Lovelock & Margulis, 1996, 2007). This term creates a certain reverence, care for its potential for one-ness.

46 **The Gaia Hypothesis.** Gaia hypothesis, model of the Earth in which its living and nonliving parts are viewed as a complex interacting system that can be thought of as a single organism. Developed c. 1972 largely by British chemist James E. Lovelock and U.S. biologist Lynn Margulis, the Gaia hypothesis is named for the Greek Earth goddess. It postulates that all living things have a regulatory effect on the Earth's environment that promotes life overall; the Earth is homeostatic in support of life-sustaining conditions. The theory is highly controversial (Encyclopædia Britannica, 2019; www.britannica.com/science/Gaia-hypothesis accessed on September 16, 2020).

Not all of humankind is necessarily responsible – the term Anthropocene might be too general. One might prefer the word '*capitocolene*,' meaning that the development of the western world – the role of capitalisation in particular – is the cause of the rapid alteration and colonization of the earth. In the age of discoveries, a culture of extension and growth was necessary for survival, to feed growing populations or to provide the resources for war. Growing populations were useful in economic terms as well – more use and more workers – one of the main motivations for growth (Davis, Moulton, Van Sant, & Williams, 2019; D. Haraway, 2015). Depending on the meaning, others have called it also '*Plantationocene*⁴⁷ and '*Chthulucene*⁴⁸

What kind of measures do we need to take: where do our priorities lie? Designers intervene in the world with conscious intervention that has an impact on other beings. How could the design discipline, or informed subjective design practice, respond to and even redefine this question. How can designers find and apply

47 **Plantationocene,** a term as a way of drawing attention to the planetary effects of extractive practices, monoculture development, and coercive labor structures that have undergirded modernity and climate change since at least the 1600s, can provide a useful rubric for thinking through human-agent ecological change, especially as these changes unevenly affect different populations and regions. Furthermore, the plantationocene calls attention to the indelible ecological and economic legacies of imperialism including patriarchal and race-based hierarchies, and inequities among diverse peoples based on race, gender, class, and sexual orientation (Haraway, 2014; Tsing, 2015).

48 **Chthulucene,** a word derived from chthon, meaning "earth" in Greek and which is associated with things that dwell in or under the earth. The Chthulucene, refers to processes of reworlding. The path towards something that might possibly have a chance of living on, Haraway argues, is through the activation of the chthonic powers that are within our grasp, as we collect up the waste of the Anthropocene and the exterminism of the Capitalocene (Haraway, 2014). Found in: <http://compendium.kosawese.net/term/anthropocene-capitalocene-chthulucene/>

values to redefine their spatial interventions with their agency in such way that they give potential to self-emerging socio-ecological wellbeing, in a context of larger-scale urgent-complex environmental challenges related to the Anthropocene era? The question is: how do we all, individually, arm ourselves with a sensibility for potentiality?

The hypothesis is by looking sensitively at the environment, finding holistic values in the cyborg-landscape approaches and cooperating on minimal interventions that leave room for unforeseen emergence in the landscape, while subtly thinking about temporalities, non-human lives and allowing contaminations within the inherent context. To be sensitive, first it is important to be aware. Félix Guattari speaks about the impact of consumerism and globalization on our mental health – it makes our minds dull and homogenic, conformist and blind to our impact. He states that it is not only destroying our environments and altering our social bonds, but also the *'penetration of people's attitudes, sensibility and minds'*⁴⁹ (Guattari & Negri, 1990, p. 20). For being sensitive, we need to continually reinvent our lives, and reconnect the relationship between environmental ecology, social ecology and mental ecology.

What we can see in all these aspects is that they are shaped by a clash between man and nature. This topic lies right at the core of the philosophical debate. It seems as though we

49 Does remind of *Nineteen Eighty-four*, also published as 1984, novel by English author George Orwell published in 1949 as a warning against totalitarianism. The chilling dystopia made a deep impression on readers, and his ideas entered mainstream culture in a way achieved by very few books. The book's title and many of its concepts, such as Big Brother and the Thought Police, are instantly recognized and understood, often as bywords for modern social and political abuses (Encyclopædia Britannica, 2020; www.britannica.com/topic/Nineteen-Eighty-four accessed on September 16, 2020).

should reconsider the way nature is approached in the first place: from resource or enemy to part of us or being part of it. So, what are the problems that make this so difficult? What factors and stakes make these problems so much harder to respond to? The problems that arise in conventional approaches in relation to this clash might be those that do not consider chaos as part of the solution.

Also a potential issue in religion, trends and cultures: there is the problem of morale, good and bad, and directing what should be the best solution to the problem. Given the challenges of complexity, we might feel safer associating these problems with a more measurable issue, such as the increase of CO₂ in the air. It is easier to work on symptoms than on causes, since they are tangible. Seeing things only for real when they are tangible is part of the problem. Post-modern architecture, through the notion of 'contrived depthlessness,' can be seen as a lack of meaning or depth. Capitalism deals with space as if it can be possessed. This, on the one hand, seems to be a very natural, instinctive posture: if you sow nettles in a garden, the garden will be full of them. It is the survival of the fittest, and everyone has to fight for their space in order to survive. In a research study about trees, however, it was found that plants help each other. The trees in a forest are not in competition in the same way that Manhattan skyscrapers are (Simard, 2016). When westerners came to America, the Indians had a different concept of land ownership. A problem with the idea of capitalism is that when we own something, we have a right to the natural produce coming from that ownership: we feel entitled to it. When we own land, we earn the life the soil brings. When we own a factory, we earn the outcome of it, while the workers put their life's energy into it.

In our direct environment, changes are not easily visible. Things are often cleaned up before we know it, they are hidden or simply come into

our awareness slowly. But the abandonment of places as the result of rapid programmatic changes is ubiquitous. There are abandoned villages, industrial buildings, buildings kept by private owners to increase their value through speculation, but also leftover spaces between infrastructures or mining works. These places seem to have no value – they lack the programming implemented by the human cause – and therefore struggle to find meaning again.

This lack of programming can be temporary – other projects are left to decay. The German WWII bunkers at the Atlantikwall have not been touched, but are slowly fading into the ocean. A problem of abandoned places is that they are seen as negative or dangerous. They remind us of a lack of control over ourselves: time and chaos will take over and one day, we as our identity as person, family, heritage civilization, culture or species we will be forgotten.

‘Everything tends to flatten out at the level of contemporaneity and simultaneity, thus producing a dehistoricisation of experience’ (Jameson, 1991).

4.10 MODES OF LIVING

Who to blame, what to do? Simon Lewis and Mark Maslin (2008) provide us with an extensive overview of how we have arrived in the Anthropocene. They say that we might have almost spoiled the world, that modern humans are destroying the world and that we should go back to an indigenous lifestyle. Again, everything depends on perspective. If we are rich, we might say that the wealthiest communities should clean up the world, and if we were all rich, the world would look much better. If we lack wealth, we might say that the rich destroy the world with their over-consumption.

Beyond these perspectives, Simon and Lewis ask how can we approach the new era of high production and consumption as one connected

global network? The critical question is this: will this mega-complex civilization continue? To steer the world towards a better future, we need fresh and new perspectives to look at this civilization more clearly. To access new perspectives, we need possibilities for new, alternative behaviors and experiences. People’s behavior is influenced by the way their world is created around them.

Lewis and Maslin identify five modes of living: hunter-gatherer, agricultural, mercantile capitalist, industrial capitalist and consumer capitalist. These developments, made possible by technology such as the domestication of fire, the mobile printing press and the telegraph, do not mean that wellbeing and freedom progressed as well. And there is no natural law saying there are only five modes of living. Can five centuries of expansion, colonizing new places and peoples to exploit, continue? And more specifically: will costs increase when cheap workers, food, energy and resources run out? Are we humans about to become bacteria in a Petri dish, meaning society will collapse as it has done before? Or will today’s mode of living be replaced by something new, something better, leading to much better lives for humans and all living things on earth? (S. Lewis & M. Maslin, 2018).

Can ‘Homo Dominatus’ become wise? Lewis and Maslin ask. In our current situation, there are three possible futures: the way we live today will continue and become more complex, it will collapse, or we will find a new mode of living. This new mode of living would mean the structure of societies, their wishes, how individuals spend their time on earth and ideas about the world would all change, with a huge impact on the world. This new mode of living could be a network of civilizations that is thoughtful and wise to each other, the planet and all its life (S. L. Lewis & Maslin, 2018).

Design and art can challenge and imagine this sixth mode of living by creating objects or places that convey meaning and manners into relationships between life and space on earth. Design is a subset of all human activity and is used to enhance our activities by making them more desirable, feasible and viable regardless of the focus of our work. We are part of a human system that is changing the dynamics of the way life on earth is disrupted. What role do designers play in this ongoing discussion? What attitudes can be adopted that impact the way societies think and experience the world as a source of wellbeing, while acknowledging its overwhelming complexity? Objects, such as global warming that are invisible because of their scale and difference can be referred to as '**hyperobjects**'⁵⁰. Timothy Morton speaks about hyperobjects as places or entities that are not really understandable exist beyond dimensions of time and scale but are yet present. Because of their enigmatic form they are not relatable anymore, we might only relate to their symptoms.

For example, Timothy speaks about the problem of too many cars in the world and the pollution they cause, which is directly related to the moment we start a car's engine – but we do not link these ideas as being one. The repercussions of projects become unclear and we are unaware of how the effects of these problems will unfold in the future – this is a difficulty that needs to be part of the discussion (Morton, 2013).

4.11 ATTITUDES

By stating the urgency for designers to play a role in the discussion, having found an overview of these planetary boundaries, the question

50 Morton introduced the concept of *hyperobjects* to describe objects that are so massively distributed in time and space as to transcend spatiotemporal specificity, such as global warming, styrofoam, and radioactive plutonium.

remains: what now? This position mostly hinges on having equality in the way we humans look at ourselves and the world. It becomes vital to acknowledge the wickedness of the world, which is difficult to grasp, and we should not over-simplify or live in naive faith of a better world. This is urgent: we have to act now! Desperately looking around asking: who are we? And tearing our hair out asking: how on earth?... What can we do?

We can form a distinction based on Latour's four different approaches and their critical possibilities⁵¹. First, by acknowledging it: with 'Anthropocene realization' we place importance on the finite nature of our resources. The vector, as Dirk Sijmons puts it, is 'anxiety' (Sijmons, 2014). To create the possibility for new modes of living, we need to go beyond anxiety. Only after accepting it are we forced to find another attitude: curiosity and compassion. This can be compared to the kind of compassion we have for the people in our direct environments. We take care of our friends because we need them in our lives. Our empathy towards them is not entirely selfless: we have something to gain, and that is our happiness and survival. This needs to happen in our relationship with earth as well. To see the positions that can be adopted within this problem, let's zoom into some of the key points.

In *denialism*, the actor realizes they are incapable of doing anything about the situation and chooses to say that the situation does not even exist. It is a way to cope with problems. It may be useful in certain situations, where we must focus on a particular task and the problem is a distraction that will bring us even bigger problems. It is good to have a denier: it

51 Critical possibilities according to Latour's *We have never been modern* are: transcendence of Nature: we can do nothing against nature's laws; immanence of Nature: we have unlimited possibilities; immanence of Society: we are totally free; transcendence of Society: we can do nothing against Societies laws. Latour (1993, p.36)

is important to keep re-framing our questions and give space to others to raise very different questions that may or may not be important. Denialism is welcome in the Anthropocene debate. But it should always be accompanied by other perspectives.

The danger of denial is that problems might be argued to be irrelevant to the discussion. Denial should be the start of a discussion, not the end. Conscious denial without participation however, might as well be the same as actively participating in the problem.

Technocracy is thinking about the way that technology and engineering can save us. We as humans are capable of challenging the forces of nature. We can fly to the moon, so why can't we control the climate? But not everything can be solved with a technical solution that can eliminate or counter the problem. Donald Trump's suggestion of 'nuking' hurricanes in order to stop them is a perfect example of technocracy in a wicked problem.

In a more technocratic approach, nature can be seen as an immutable given, one that is inexhaustible and it is our right to cultivate / urbanize the land. It is the emancipation of humankind and our power on earth. Key notions include each individual's potential for freedom, a detachment from our pasts and the fight against the uncomfortable parts of human existence. Normally, the role of politicians and designers is to guide the world into utopia. On one hand, this imposes the view that the world is completely malleable. On the other hand, the idea that a utopia exists is a fallacy: the 'just world fallacy.' The idea that a just world can exist, and specifically your just world, is a one-sided idea of reality. I discuss utopia in more depth in the last chapter, where I use it as a perspective from which to describe scenarios and values.

Another problem with this idea is that it suggests that humankind actually has the power to shape the world according to its will – and that gives a lot of credit to our potential. In the Anthropocene, humankind is indeed a force to be reckoned with, but it is one without consciousness. This is not a power we can easily understand. It is a hyperobject: its scale and time are too difficult to grasp.

Taking this idea back to Romanticism, nature was indeed an immutable given, but one that also judged us. We were driven by accepting death and framing our individual role towards nature. Nature was there to be enjoyed and spoke of a character. The past and nature were glorified, as a reaction to the Industrial Revolution, the aristocratic social and political norms of the Enlightenment and the scientific rationalization of nature. In the idea of the Anthropocene, we have to shift away from Modernism simply because it seems difficult to grasp the vastness, hyperness of objects with top-down. Earth itself can be seen as an important actor, even a stakeholder, in our decisions. We can no longer choose, decide for it: concepts of nature, culture (and cyber) are entangled.

In the late 18th and 19th centuries, the philosophy of humanism was a cornerstone of the Enlightenment. Believing in the universal moral core of humanity, it followed that all people are inherently free and equal. For liberal humanists such as Kant, the universal law of reason pointed towards total emancipation from any kind of tyranny. Kant said that people must be seen as the goal, not the means.

A more object-oriented ontology would question whether this is the difference between human beings, animals and objects. This announces a more *post-human*⁵² perspective.

52 *Posthumanism.* Posthumanism is a

The criticism of this object-oriented ontology, equating objects and non-human life to human life, might be that it is dehumanizing. But this is not the point: the idea is to create more empathy and room for the other. Others also talk about the idea of better not to be born at all (Benatar, 2006), not to exist as species at all.

Norton argues with weak anthropocentrism that in order for a value system to work it must not adhere to utilitarian thought because that is too individualistic. A more fitting view upholds the idea that even the potential life of future generations is important, not just those alive today. It is assumed that a whole new set of people will be living on Earth in centuries to come, so for us to ignore their existence is mere folly (Norton, 2003).

Norton's overall proposal for an environmental ethic is a weak anthropocentric environmental ethic. The ethic would focus on finding all value in human loci, and also on being non-individualistic. Ethical questions about the environment are then divided into those

concerning distributional fairness within generations and those considering long-term, cross-generational issues. Individualistic ethics will not resolve these issues because a future generation will not be taken into account as long as we continue to try to simply maximize our own happiness in the present. At the same time, Norton also maintains that humans should not look to destroy themselves because a human-inhabited universe is better than one without humans. The extinction of the human race should be avoided but at the same time fairness in all aspects of environmental issues should be considered.

Others look from a more *animistic*⁵³ viewpoint. As part of the 'Right to nature movement,' Whanganui River, Te Urewera Park and Mount Taranaki in New Zealand are now seen as legal persons. They are living ancestors, incorporated non-humans. This creates awareness that in western culture, animals and plants are seen as a resource or subject, not as a legal entity.

4.12 COLLABORATIVE WORLDING

What ways are there of world-making, what is art, when is art, when does it create a world?! Peter Sloterdijk says we create a worlding

philosophical perspective of how change is enacted in the world. As a conceptualization and historicization of both agency and the "human," it is different from those conceived through humanism. Whereas a humanist perspective frequently assumes the human is autonomous, conscious, intentional, and exceptional in acts of change, a posthumanist perspective assumes agency is distributed through dynamic forces of which the human participates but does not completely intend or control. Posthumanist philosophy constitutes the human as: (a) physically, chemically, and biologically enmeshed and dependent on the environment; (b) moved to action through interactions that generate affects, habits, and reason; and (c) possessing no attribute that is uniquely human but is instead made up of a larger evolving ecosystem. There is little consensus in posthumanist scholarship about the degree to which a conscious human subject can actively create change, but the human does participate in change. Keeling, D., & Lehman, M. (2018, April 26). Posthumanism. Oxford Research Encyclopedia of Communication. Retrieved 16 Sep. 2020, from <https://oxfordre.com/communication/view/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-627>

53 *Animism* (from Latin: anima, 'breath, spirit, life') is the belief that objects, places, and creatures all possess a distinct spiritual essence. Potentially, animism perceives all things—animals, plants, rocks, rivers, weather systems, human handiwork, and perhaps even words—as animated and alive. Animism is used in the anthropology of religion as a term for the belief system of many indigenous peoples, especially in contrast to the relatively more recent development of organised religions. Website: <https://en.wikipedia.org/wiki/Animism> Retrieved 31 September 2020.

through thinking – a philosophy of culture. Andrea Branzi (2010) explains it in a rather Italian way, seeking to integrate aesthetics with the perceptive condition, a cautious behaviour, in which design balances art and technology to make the world more liveable. Luigi Codani was inspired by natural forms – to dwell is to make the place ourselves, to be part of the world.

Latour calls for the expansion of the word ‘design’ as an action that has moved past the Promethean way. Secondly, he outlines the advantage to design of attention to detail, crafting and slowness: something the Modernist ethos lacked. Thirdly, Latour states that design can give meaning and open interpretation to artefacts through the fact that their processes are layered with meanings – the outcomes of happenings. This is closely related to another advantage: design can never be created *ex nihilo*, it draws attention to what exists: to design is to redesign.

Latour’s last advocacy in relation to design is that it involves an ethical evaluation of ‘good versus bad design’ – here good and bad become a consideration of morals, materiality and culture. This leaves room for interpretation: while in modernist approaches this is merely a factual distinction between goodness and badness, in post-modernism it is also explained in a post-modernist way: not defined by boundaries, but leaving room for other interpretations (Latour, 2008).

Haraway’s wording is ‘*a story, a speculative fabulation, and a strong figure for multispecies worlding*’ (Haraway, 2016, p. 10).

She argues that worlding is dependent on the way we experience and attune to aspects in our worlds, how we interact, encounter and engage with the environment.

4.13 POSITIONING

Looking into different perspectives, forced me to doubt my assumptions. I could complement them with opposing assumptions. But would that be enough? In this train of thought, I made myself look again at my own perceptions, without making an immediate judgement on them, without trying to define them.

In this way, subjectivity is acknowledged. Phenomenology recognizes that we always see an object from one side, and that, regardless of your lens, there will always be a dark side that we do not understand or even recognize. Object-oriented ontology says that nothing can ever be approached and understood in its totality. We can only get ‘a taste of reality.’ It is therefore that we need to keep assimilating and shifting attitudes.

Design agency refers to the practice of creative ‘agents’ and how they deliver a service in a certain manner. With an appreciation for process and meaning over material culture, design agency has become a bigger part of the picture.

It goes from material culture to the idea of matter and the meaning of agency. This means that an awareness of the farmer’s own philosophies would alter their crops – agency is about the farmer’s awareness of this process and the positioning of their impact on certain values. I see the meaning of design agency as a link between practical design and being aware of one’s philosophical, political, environmental meaning while working. As many design offices have to work hard for their financial existence, there is little time to really consider these deeper thoughts, values and meanings.

Design is not given time to transcend existing, pre-programmed packages of forms and meanings. The results of these designs can still

be beautiful, but the danger is the receptivity of the designer's thoughts and the context. Is it enough that designers have learned about values like equality, sustainability, wellbeing, transparency and privacy during their years of education?

To describe design agency would mean to define one's values as designer, constantly putting those values into perspective and linking them to practice. This would result in 'value sensitive design.'

While design initially seems to mean making manners out of matter, making things attractive, from objects to cities and landscapes, to nature itself, the question is now how to handle this reformation with care. According to Bruno Latour, in the article in which he frequently refers to Peter Sloterdijk, there are five advantages for design in the 21st century. He speaks about the idea of *hubris*⁵⁴ – design can be more modest and less megalomaniac, we can look at it in more detail, being aware of consequences and the skills required. We can be more concerned with meaning – the idea of things. Also, there is no *tabula rasa*⁵⁵: everything has always to be re-designed. Then, finally, an awareness of the ethical dimension: when is design good or bad?

54 *Hubris*, Greek *hybris*, in ancient Athens, the intentional use of violence to humiliate or degrade. The word's connotation changed over time, and *hubris* came to be defined as overweening presumption that leads a person to disregard the divinely fixed limits on human action in an ordered cosmos (Encyclopædia Britannica, 2017; www.britannica.com/topic/hubris Access Date September 16, 2020).

55 *Tabula rasa*, (Latin: "scraped tablet"—i.e., "clean slate") in epistemology (theory of knowledge) and psychology, a supposed condition that empiricists have attributed to the human mind before ideas have been imprinted on it by the reaction of the senses to the external world of objects. (Encyclopædia Britannica, 2020; www.britannica.com/topic/tabula-rasa Access Date: September 16, 2020).

Within the Anthropocene and its ambiguity, where one concept merges into another, a big question mark hangs over who is responsible for what. What kind of stories are just big enough? I believe this 'big enough' that Donna Haraway refers to can be established by connecting those big and small stories. Design can play a role in the connection of scales, giants and dwarfs. In terms of the future challenges facing Earth, how should the designer respond or play their role in redefining the spatial environment in the Anthropocene?

Design should integrate life, death, the sacred. It is mainly focussed on the anthropological dimension – design should help us propose a new style of living, in which we create a more diffuse way between beings. That problems exist but are not to be denied is an observation: it is not the matter how we can change this situation, but how we deal with it.

This demands a less conventional mindset and more adaptable capacity to act. Articulating the Anthropocene as a basis for a conceptual framework, there are three aspects to explore further: an agency for urges, a mind of entanglement and the ability to respond.

Firstly, we can see that there is an urgency to act. An urgency to take action to prevent more extinction of animal and plant life, to raise awareness of dying coral reefs. So the question would be: how can we respond to this urgency? How can agency work to control urges and react to urgency?

Secondly, in the Anthropocene, the relationship between nature and humans is entangled: essentially, the notion of the Anthropocene means it is no longer possible to frame both in separate boxes. Some typical Anthropocene elements can show us this entanglement and are possible ways to redefine the human/nature concepts for this epoch. This understanding also takes a humble attitude towards the complexity

of the Anthropocene: so complex it is not possible to fix it with one (technocratic) solution, nor is there one desired outcome. The actor, designer or intervener has to be aware of their own entanglement with the situation, and be sure to leave room to weave new entanglements in space.

The third aspect comes from a 'zooming out' from humans as the deciding factor in the world, and is an awareness in which rivers, animals and objects could be seen as equal entities within the composition of historical burden and responsibility. Every entity responds differently – for them, to be able to respond for themselves and others autonomously means a worlding of self-regulating and reacting entities. This implies that one is response-able, receptive to one's environments. So it is not only 'a right to vote,' it is also an obligation to absorb the world around us.

CONCLUSION: RESPONDING BEYOND CONTROL

A plea for experimentation and comfort with failure

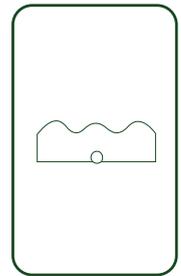
To be able to approach complexity, the voice of the actor becomes vital: only by being sensitive to their unique locale can each designer respond to the big and small stories. To position this voice, one must inquire as to what is going on in the world, decide what is relevant in order to be able to address questions that link to both inner urge and outer demand. Another question is knowing how to deal with the ocean of information available: being 'noise-wise.' We can see it as an inquiry into valuable questions: what are the important questions I should ask myself? How do I make the right choices? It is within this idea of questioning that the designer should seek to respond, with the chance to redefine things. In complex situations, it is more important to address problems that

are considered meaningful than to address problems that are solvable.

The term 'Anthropocene' introduces a new story of what it means to be human and, therefore, about how to look at the world. This places the notion of the world as the ultimate exercise for making the designer's voice urgent. We can find a variety of positions to adopt towards environmental problems, from denial to activism and reverence. These reveal valuable ideas and positions. Values are part of a collective human network of every-day practices and traditional thinking that do not change easily. Many of our motivations are unconscious and subjective. They might have nothing to do with other realities. Our attitudes towards problems influence the world. Voices change manners, manners change matter. It turns out that manners matter.

Being aware of a position in relation to complex problems and being response-able entails the ability to be critical. Criticality can be exercised from a perspective of awareness. Submergence into the rich variety of positions invites us to be influenced by their range, or at least to wonder where the position has come from. Following a given list, such as the UN's sustainable development goals, gives us a structure to think about and respond to, but not a solution.

Most important is that the response to the issue of 'too big' should not be guided by the mission of successfully controlling and 'being right'; with complexity, the mission is to exercise voice and criticality, asking questions together and questioning your ability to be response-able. To respond, act and react beyond control. For the futures ahead, design agency in the Anthropocene could be concerned with the ability to **respond beyond control.**



SUBMERGE

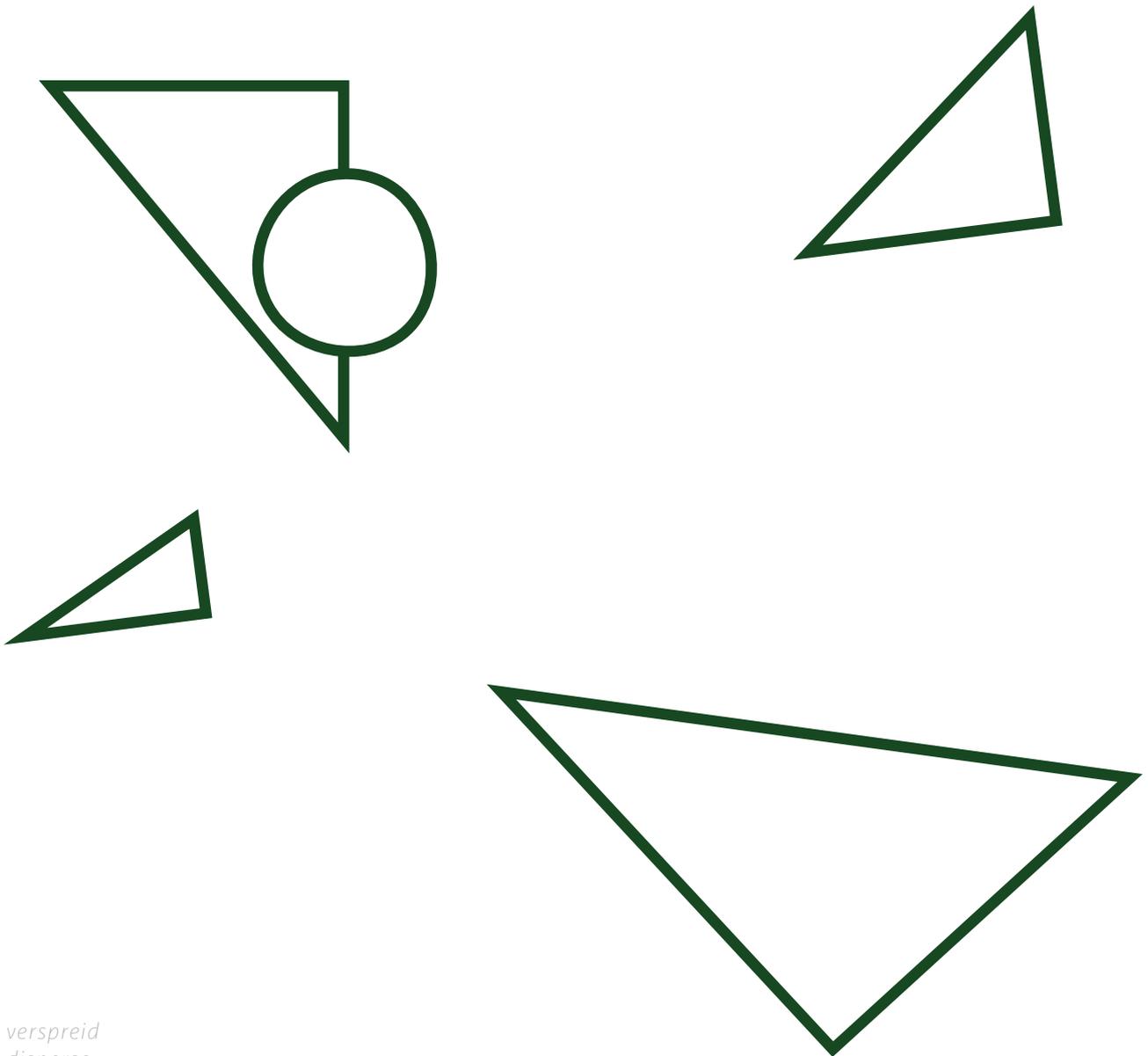
dance around
problems from
different angles

doing and
learning can
be without
solutions,
data is neutral

collect
perspectives and
mindsets for
insight to biases

always fail, but
without failing.
get comfortable
with not
knowing as way
to rise

explore
options.
it is not needed
to simplify or
decide
right now



verspreid
disperso
scattered

verb

1 he broke the slices of bread into pieces and scattered them over the lake | scatter the seeds as evenly as possible: throw, strew, toss, fling; sprinkle, spread, distribute, sow, broadcast, intersperse, disseminate; shower, spatter, spray; literary bestrew. ANTONYMS collect, gather

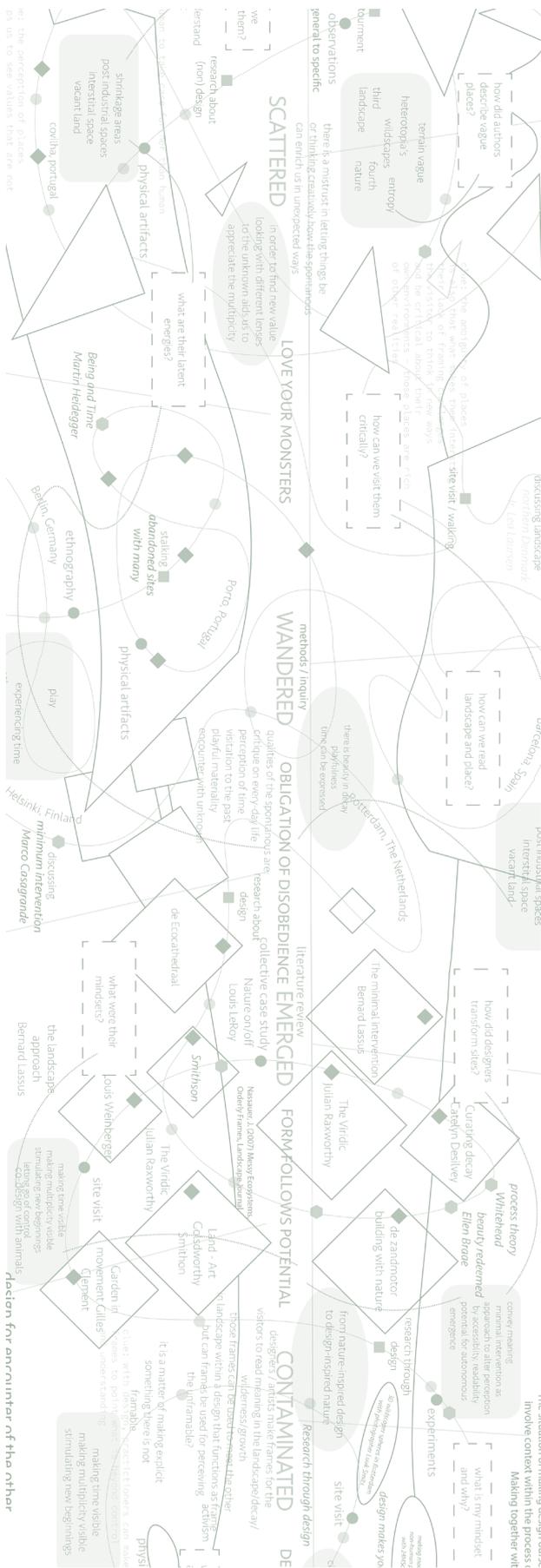
2 the police fired over their heads and the crowd scattered | he spurred his horse forward, scattering onlookers in all directions: disperse, break up, disband, separate, move/go in different directions, go separate ways; dissipate, disintegrate, dissolve; drive, send, put to flight, chase. ANTONYMS assemble, converge, congregate

3 the sky above them was scattered with stars: fleck, stud, dot, cover, sprinkle, stipple, spot, pepper; litter; literary bestud.

(Waite, 2009).

mosaic 3: SCATTERED

collecting concepts



5.1 PERSPECTIVES ON SPACE

By embracing ‘monsters’ as part of ourselves, we can look with renewed desire and responsibility, rewrite our value constructs to see different new qualities in every character. Mistakes do not inform our shortcomings, but our opportunities. This chapter is a plea for seeing value in the imperfect, undetermined and decaying.

‘There is an implicit mistrust of ‘letting things be’ or thinking creatively about how spontaneous processes of ecological change might enrich the city in unexpected ways..’
(Gandy, 2013, p.263).

In the Scattered chapter, a bridge is made between a general approach of responding beyond control and finding specific spaces that could represent this complexity. To build this bridge and to frame it within a certain type of space, spatial-philosophical concepts by authors such as de Sola-Morales, Deleuze, Simmel, Levebvre, Zumthor, Pallasmaa, Marot, Alexander, **Merleau-Ponty**⁵⁶ and others are placed in dialogue with spontaneous encounters in the environment. These concepts help create links between theory and the spatial environment, giving insight into what beyond control actually means and the specific qualities of those places.

This is used as a tool to translate the theoretical, invisible world into experiences that resonate with the human condition. The chapter plays with the vocabulary of spatial, visual and perception-related concepts backed by authors. his chapter asks: what are the perceivable signs of invisible complex problems in our spatial

56 **Phenomenology.** At the core of Merleau-Ponty's philosophy is a sustained argument for the foundational role perception plays in understanding the world as well as engaging with the world. *Phénoménologie de la perception* (Paris: Gallimard, 1945)

environment? How and where can we encounter them? How do authors describe them? How does theory about different perspectives on space help frame space in its multiplicity?

Concepts of space found in the disciplines of architecture, philosophy and anthropology are used as stepping stones to describe 'places of the Anthropocene.' Without the literacy to see latent qualities in places, those places can seem empty – but they never are. Literature helps us look with different perspectives at latent qualities in 'scattered places'.

The lexicon gives rise to a positioning and guides the research further. It is a journey through theories. The grounded journey dives into different theoretical frameworks, epistemes, and references from other disciplines such as sociology, philosophy and history (Frayling, 1993). The methodology for this chapter falls under research about design – it goes from general to specific and uses literature, observation of artefacts, site visits and '*détournement*'.

This chapter argues that when visiting sites, designers should be aware of other, unfamiliar values of the place, rather than thinking about projecting unexpected values on those places – the landscape architect is the mediator between stories that are 'too small' and stories that are 'too big'. They have to be able to see value in the undesired effects of the Anthropocene. We all need to 'love our monsters.' Design can help us to approach and understand these monsters.

5.2 ABOUT LANDSCAPE

The way we look at the world influences the way we design in it. As a fundamental introduction, the first issue to address is: how can we comprehend and intervene in the landscape as designers? For this, we must understand how landscape architects perceive their position.

'Landscape is always in becoming. Not only is landscape always changing, shifting, reassembling, but it is always producing difference. The processes that shape a landscape are varied. There are not only geological processes (plate tectonics, sedimentation, erosion, etc. but also construction, resource extraction), biological processes (plant growth and decay, animal populations, bacterial colonization, etc.), and social processes (cultural, political, economic, etc.) but these processes interact, and form assemblages that produce new configurations and becomings beyond the initial components – emergence'
(Evert et al., 2010, p.509).

In *Design on the Land*, Norman Newton gives a definition of the landscape as: '*the art—or the science if preferred—of arranging land, together with the spaces and objects upon it, for safe, efficient, healthful, pleasant human use*' (Newton, 1971, p. XXI). Nowadays, we can see landscape as an 'expanded field,' a discipline that bridges science and art, mediating between nature and culture. Elizabeth Meyer borrowed the concept of the expanded field from Rosalind Krauss and considers the discipline also *in* an expanded field. In her essay, she approaches landscape as a flexible and broad context where landscape operations are played out. Meyer seeks to place landscape in a grey area that resists binary pairings such as human/nature, culture/nature, dangerous/safe (Krauss 1977; Meyer, 1997). Before the designer imposes an intervention on the landscape, they must form an understanding of it. Understanding something like a landscape is a wicked problem, as it exists as a result of multiple scale relationships and can be viewed through endless different perspectives.

The landscape architect is trained to look at an area as a whole, existing through a multiplicity of different layers. Landscape architects can look, for example, at morphology, social



Fig. 22 *Towards design agency in the Anthropocene.*
How can we perceive, think, move and act in a complex landscape?

appropriation, ecology, economy, politics, meaning, materiality and history to find out how the landscape is shaped, who uses it, what grows there and why it is experienced in any particular way.

How this information is juxtaposed and ultimately works as guideline for shaping design is inherent in the landscape designer's role. Because spatial design is an applied science, the properties of the inputs and outcomes of this information differ every time. Marc Treib emphasizes the contextualized understanding of the place, saying that a landscape is the context provided by all the elements as a group and system that structures them, it is the interrelationships that ultimately define the element (Treib, 2011).

Artist and landscape architect Bernard Lassus states that the formulation of and solution to the problems of understanding landscape can only be attempted from a wide cultural basis. Confronted with modern architects, whose approach often starts from *tabula rasa* and *ex nihilo*⁵⁷ interventions, he mentions the importance of the landscape dimension including the 'multiple relations which bind us to the visible, and tangible, world' (Bann, 1983).

Of course, each designer will differ in terms of the aspects of the context to which they pay more attention. One advantage of a dialectic approach to the landscape is that it does not necessarily come from a human viewpoint.

Landscape design can be entirely for the sake of non-human entities, and in this way, it distinguishes itself from the closely related disciplines of urbanism and architecture, which are better understood from the human perspective. Landscape architecture allows us some distance from the human-centered

perspective, as well as other biases.

'Natural spatial conditions and natural processes are considered on an equal footing with man-made elements and human practices. This mindset relies on the assumption that things do not exist in isolation from one another, but are moving parts in a complex'
(Diedrich, 2013).

Reflecting upon Newton's phrase, and considering the interrelatedness of topics, as demonstrated by the Rubin's Vase, landscape architecture can be seen as neither art nor science, but rather as art and science; it fuses environmental design with philosophy, biology and cultural ecology:

'Landscape architecture aims to do more than to produce places for safe, healthful, and pleasant use; it has become a forum for the articulation and enactment of individual and societal attitudes toward nature. Landscape architecture lies at the intersection of personal and collective experiences of nature; it addresses the material and historical aspects of landscape even as it explores nature's more poetic, even mythological, associations'
(Saunders, 2008, p.186).

This is why I do not approach the work just through the lens of the landscape architect, as I want to look beyond the idea of disciplinary houses and disciplines. The Anthropocene is an opportunity for new disciplinary alliances. However, there are some points worth highlighting. I have been trained as a landscape architect, which has contributed to my toolbox of ideas. The things I have learned about creating and the ways I have been contemplating their meaning form the basis of this PhD.

As a practitioner, the landscape architect can work with a variety of issues that involve

57 *Ex nihilo*. Literary: from out of nothing.

3. work of assemblage / worlding

anthropocene realization

1. work of purification

transcendental

mythical

wilderness

cultivated

entropic

architectonic

natural

artificial



other / nature

self / culture

Fig. 23 The journey in-between. What are the dichotomies to overcome and what is the role of perception, criticality, site visit and designing with in those 'works'?

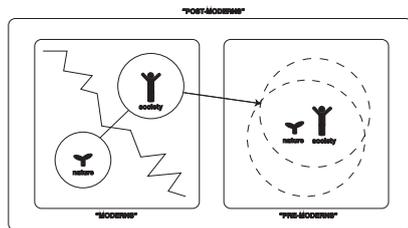
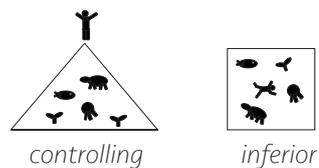


Fig. 24 We have never been (post)modern. Breaking with a dichotomy of non-human v.s. human, a dichotomy of dualism v.s. hybridity (Latour, 1991) towards a of assemblage / worlding.



translation / assemblage / worlding

Fig. 25 Attitudes connected to nature culture and landscape approaches.

thinking about time: the aging of trees, sediment in rivers, user experience, behavior of animal species, changing seasons, weather, climate and storms. This means they are trained to work with ephemeral projects as well as designs made to last or change over time. The landscape architect is involved with the configuration of the landscape: the understanding of space on a geomorphological scale, inhabited by an ever-changing ecology of species. The landscape architect is concerned with the position of the individual in this larger space: often through design, they are the mediator between the experience and the individual understanding of these larger frames of time, space and network. Since it is the job of the landscape architect to approach, intervene and care for scales that can lie beyond our everyday perception, I believe landscape architecture as a profession has an important role to play in responding to wicked problems related to the Anthropocene. Landscape architecture is:

'A profession and academic discipline that employs principles of art and the physical and social sciences to the processes of environmental planning, design and conservation, which serve to ensure the long-lasting improvement, sustainability and harmony of natural and cultural systems or landscape parts thereof, as well as the design of outdoor spaces with consideration of their aesthetic, functional and ecological aspects' (Evert, 2010, p. 509).

As Nijhuis & Bobbink conclude, landscape architecture as a design discipline is concerned with three areas of activity: planning, design and management. Landscape planning is concerned with the long-term development and preservation of natural and cultural landscapes by the implementation of strategic goal-oriented concepts and allocation of types of land use.

Landscape design deals with form and meaning

and is concerned with the organization of a physical, functional and aesthetic arrangement of a variety of structural elements to achieve desired social, cultural and ecological outcomes. Landscape management is concerned with the conservation and enhancement of the long-term beneficial use of landscape resources as well as heterogeneity, character and beauty (Nijhuis & Bobbink, 2012).

These activities overlap and address different levels of scale. They require a multi-layered understanding of landscapes: their spatial structure, history (relational) and context, as well as the ecological, economic and social processes involved (Marot, 1995; Prominski, 2014; 2018). This implies that there is a wide range of possibilities available for knowledge acquisition in landscape architecture. The point I make is that when novice designers are taught to work with goal-oriented concepts, arrangements and enhancements for beneficial use, there is still a question of whom these goals, arrangements and benefits are for – and it is easy to confuse values. As well as working with wicked, goal-oriented concepts, we need to work with the understanding that not all ideas will have the expected outcome – we can look at ways in which the work makes room for the unexpected and undefined.

The challenge for the landscape architect is the multiplicity of actors involved in their considerations – but this is also an opportunity to gain unique perspectives that shift from the anthropocentric to a 'pan-centric' viewpoint. This is a viewpoint we must consider (see Chapter 2). In his work, author Martin Prominski also looks at these different perspectives on nature: from a dualistic Western approach to the Japanese tradition of seeing landscape as a unitary, multi species accumulation of relationships between groups and individuals (Prominski, 2014; 2017;2018).

But when the human is no longer the starting point, how do designers make sense of

landscape, entangled and submerged, where outcomes are no longer defined by dualistic concepts, strategies and goals, but need to be seen as ever-changing entities that cannot be characterised through the perception of one specific discipline, institution or individual? How can spatial structure, context and processes be understood, and how can goals, arrangements and benefits be determined?

5.3 CONCEPTS OF SPACE

This chapter looks at a selection of concepts⁵⁸ that approach the ambiguity of space, frame space without determining it. Readings about urban voids can be found from authors such as Solà-Morales; Ian Bentley, Claudie Ouellet, France Dumesnil and Pierre Demathieu amongst others. Content about emptiness or details about the vague seem paradoxical, but for this thesis used as a tool for learning where complexity and ambiguity can be studied in our direct surroundings. There are many concepts that leave room for ambiguity, vagueness and darkness in relation to space: they are discussed in order to formulate an understanding of an autonomous layer beyond human control.

58 For example: "derelict land" (Barr, 1969; Kivell & Hatfield, 1998; Oxenham, 1966); "zero panorama," "empty or abstract settings," and "dead spots" (Smithson, 1996a/1967; 1996b/1968; 1970, as cited in Reynolds, 2003); vacant land" (Bowman & Pagano, 2004; Northam, 1971); "wasteland" (Gemmell, 1977; Nabarro & Richards, 1980); "il vuoto" ("the void") "urban wilds" and "urban sinks" (Lynch, 1990); "new, nameless places" (Boeri, Lanzani, & Marini, 1993); "dross" (Lerup, 1994) and "drosscape" (Berger, 2006); "no-man's land" (Leong, 1998); "dead zones" and "transgressive zones" (Doron, 2000); "superfluous landscapes" (Nielson, 2002); "spaces of uncertainty" (Cupers & Miessen, 2002); and "le Tiers-Paysage" and "les délaissés" ("the Third Landscape" and, roughly, "leftover lands") (Clément, 2003). Other common terms, among others, include "brownfields," "in-between spaces," "white areas," "blank areas," and "SLOAPs" (Spaces Left Over After Planning) Doron, 2007). Found in: Jorgensen & Keenan (2012)

Looking at the meaning other authors have given to ambiguous spaces helps highlight certain qualities that might be overlooked in everyday life.

Terrain vague, a term commonly used by spatial designers, was coined by Barcelona-based architect de Sola-Morales. The architect refers to it as a space where nothing is defined, where an open understanding is possible. It is a lack of programming that gives these places their unique properties – there is room for the potentiality of the place: the place itself moves into the foreground. The lack of conventional programming places a magnifying glass over the experience of the place. Terrain Vague is temporary: it is a place that lies in between existing and unbecoming, often with histories of 'destructive architectural projects of a colonial nature' (Sola-Morales, 1995). They contain a problematic succession of eviction and erasure. They are critical in understanding how the 'terrain vague' is both a condition and a process (Tyner, 2016). Any place that might be overlooked because our pre-programmed view of the space does not register it can be called a 'terrain vague': there is no clear language about the values of the place: is it a safe playground for children? Or is it an industrial site? The way the place is expressed gives so many different hints that it is confusing to try to define it.

Mostly, there is no clear way of predicting what stories unfold in such spaces: we are left in the dark in terms of the artefacts, surroundings, paths, animals and people we might encounter.

Wildscapes are sites where the activities that are carried out respond to the spontaneous desires of those who live there. For example, such places are often used for different human practices: from gardening, camping or sex work, to walking the dog, finding material resources, picking fruit or a space to make fire. Places that are less strictly monitored, as opposed to monitored spaces, can, with their signals,

represent other needs and wishes of society.

'In contrast to the partial, simplified and sanitized meanings encoded in so many of today's urban public spaces, urban wildscapes contain multiple, often contradictory, meanings, insecurity, disorder, decay, waste, confusion, freedom, possibility, discovery, adventure and enchantment'

(Jorgensen & Tylecote, 2007, p. 453).

Jorgensen and Keenan summarize wildscapes as the place where the honest passing of time can be seen – where there is a non-judgemental politics of process. This is because the place is not clearly owned or dominated. Wildscapes refer to the wild, 'self-made' character of the place: this can be spontaneous nature, specific material (de)composition or its occupation by people in many different ways (Jorgensen & Keenan, 2012). The philosopher Heraclitus states that change is the universal law of life: 'It is impossible to set foot in the same river twice.' Years later, Deleuze speaks of the idea that everything that exists is always in the process of becoming, and never is. Nothing is ever finished: everything is mutating, transforming from itself all the time. Deleuze's idea is that thinking is not stable. We cannot grasp the totality of the way one idea is understood by other people. Language and conceptualizations create generalizations and difference. He explains, for example, that the leaf on a tree might seem like the same leaf as the tree gave last year, but it could never be the same.

This allows for all possibilities to exist, and everything is different from everything else, while also connected through the relationships between them. If this is not recognized, the leaf cannot evolve and become something else in the future. This also works for thoughts and ideas. If we do not consider our understanding of the world as something that is always moving, from minute details

to entire frameworks, there is no space for adaptation through context, there is no room for the 'autonomous wild'. I believe, therefore, that it is these qualities in the here and now that landscape architects must deal with, for example by designing altering frameworks for open systems. Those frameworks pose the question: can homo dominatus become wise or sensitive (Lewis & Maslin, 2018)?

This can be seen as a matter of re-framing, but even the way we frame things might have to be reconsidered. Deleuze's 'monism' is a potential of unlimited amount and complexity. This does not mean all possibilities exist. No two hands are the same. Repetition creates generalization. But difference is everywhere – every new act creates novelty. Our thinking is made up of repeated ways of working, combined with new possibilities. Maybe the real problem of empty land is the projection of repetition on spaces, which renders them meaningless and without possibility.

Deleuze calls the plane of unlimited complex possibilities the *virtual plane*⁵⁹ (Deleuze, 1994). As Deleuze says, something in the world forces us to think, not just rationalism itself, as Kant argues. From this perspective, it seems that it is not thinking itself that makes us do and alter things – our 'altering' thinking is forced upon us by our 'altering' environments. The 'virtual' is the product of the intensities between those alterations, or differences. It is determined by the relationship of ideas and multiplicities. The result of this is random and contingent. Multiplicity creates possibilities. The virtual is not possibility – it creates the possibility of things being possible. We must acknowledge that possibilities come from the ever-altering

59 *Virtual plane.* 'The virtual is opposed not to the real but to the actual. The virtual is fully real in so far as it is virtual'. (Deleuze, 1994) The virtual plane is the totality of differences there are: an assemblage of possible actuals that indicate as well the multiplicity of possible futures.

reality.

The concept of thinking plays an important role in dealing with the wickedly impossible. The objective is not to re-frame the idea of abandoned places, or to really define their qualities. I think it is vital to see those places in their multiplicity, their richness and way of coming into existence.

As opposed to utopia or dystopia, the *heterotopia*⁶⁰ is a place that does not really exist but which can be seen as a space that is the result of the human mind. Foucault first explained the space as a verbal space; later he linked those spaces to existing physical spaces as well. A school or a mirror can be seen as a heterotopia, as they are a result of culture and the way public space works (Michel Foucault, 1967; Topinka, 2010). However, the way humans react or even think in the space can change, and it therefore becomes an area where the subject is controlled. Foucault calls the heterotopia the imagining of a utopia, but one that contains aspects that are not desired: it therefore becomes a mixture between the shapes of reality and the desires of the mind, like J.K. Rowling's 'Mirror of Erised' in the Harry Potter series. Is an abandoned place a heterotopia? It seems to be, at first glance, as it is undesired and seen as a bad space. However, it offers the possibility of freeing the mind of institutionalized attitudes towards it through familiarity. Hope an imagination create room for new layers of possibilities.

Non-places are temporary places that do not contain a soul and could be anywhere in the city. In these places, people remain anonymous, and they are not important enough to be called a place. Like an airport, shopping mall or hotel

room. Abandoned places become non-places as they do not have any identity. They are the opposite of the 'anthropological place,' as Augé argues. This is a place where people can express their identities, where they can meet and find common interests (Augé, 2008). The perception of the non-place is subjective. A non-place is a place where people do not live or feel a sense of belonging. The abandoned place could be a non-place, but after a closer look they are rich in potential, difference and identity.

They are places where people meet and can even express their feelings more openly because of the privacy and anonymity the place offers. Its imperfection mirrors the soul. Andrei Tarkovsky's 1979 film, *Stalker*, depicts a landscape called the Zone, an area filmed in Chernobyl where nature, culture, landscape and abandoned place merge. It is no longer clear what is abandoned place and what is background, what belongs to the living and what is death. It is the space of otherness, the space that we think of as unknown. Abandoned places are contemporary heterotopias, where places and spaces merge into otherness. These places and spaces are based on subjective readings, and therefore create a vacuum of understandings that are less tied to a program (Tarkovski, Stougatski, & Stougatski, 1979).

The French Marxist philosopher Henri Lefebvre reminds us that space is a social product – and finds its shape in a social construction. In his work, the author made an important point: we should look at the way places are made through their processes of production. As a Marxist, Lefebvre believed that places should be made through this social construct in order to be reproductive. Lefebvre contends that there are different modes of space production, all influenced in their meaning by flows (Lefebvre, 1991).

A *panopticon* is an architectural space developed for total surveillance. Useful as

60 *Heterotopia*. Coined by Michel Foucault in his early texts. Heterotopias have the strange property to mirror or represent fragments of multiple places at once, that in their assemblage can be contradicting.

a prison, it can be seen as the opposite of a stadium, where the spectator is on the inside looking at and controlling everyone in the stadium. Foucault compares this way of looking at public space with the way it is surveyed more and more itself.

Like Big Brother, in George Orwell's 1984 (see footnote 55, page 66), we all are monitored through data-mining in our networked lifestyles. In many cities, space is designed to 'discipline' us to walk in a certain direction. 'Terrains vagues' also force us, but here the intention comes more from the emerging development of the place combined with the visitor's background (Foucault, 2008).

The rather undefined terms for the aforementioned concepts could bring us closer to a description of the place's precious qualities. They can represent places of potential – a physical representation of the virtual plane – where the expression of its interconnectedness and randomness only becomes clearer. This is because the place is naked, free from our everyday preconceptions of public space. The qualities to be found are rich on their own – but they are, as ever, defined by repetition. The qualities of abandoned places are subject to a value system.

The demonstration of those qualities merely opens us up to seeing the place as a portal to other realities and qualities, rather than defining those aspects as system services for the city. There are the places that can teach visitors, through experience, to become more open to possibilities and come to an awareness of how much our thinking depends on our environment – we become contaminated – and that, vice versa, our environment is actually shaped by the day-to-day manifestation of our actions and thoughts. The idea of the virtual, the plane of possibilities, landing in forsaken places, like a space that finds form through the alterations of time, as well as through the contingent complex

processes that give rise to multiplicities, implies that character and other properties of place simply emerge. A way of working with this plane of possibilities is to create room for emergence.

Adaptability and autonomy are key to a resilient landscape. The first step in dealing with dynamics is to acknowledge wicked problems and uncertainty (Roggema & van den Dobbelsteen, 2012) and what shrinkage is (Tietjen & Jørgensen, 2016). We could think of ways of being more open to the unknown, of 'letting go,' of being at ease with being out of control:

'Processes of decay and disintegration can be culturally (as well as ecologically) productive, and, in a certain context, it is possible to look beyond loss to conceive other ways of understanding and acknowledging material change'
(DeSilvey, 2017, p.5).

DeSilvey's work explores ways we can embrace the dereliction of human structures but does not elaborate on the specific actions the designer might take. We could call on designers to be more cautious (Latour, 2008), but the damage is already done. How can designers engage with the materiality of the existing fabric?

There are many different ways of interpreting the qualities of abandoned buildings. How can the 'derelict', 'decayed' or 'abandoned place' be approached as a resource in a paradigm that seeks to optimize the consequences of abandonment? At first, the intended design of the place has its own meaning: the architecture as a quality. Then, on top of that, the environment of the abandoned place has a specific feature: spontaneous nature. Overlooked, abandoned places in the city and around can be seen as a mediation between the landscape and ourselves, in the sense of time, nature and space.

It is not necessary to describe the pure material aesthetics of abandoned places. Firstly this has been done extensively, but secondly because in this work I like to see the phenomenological qualities of the abandoned place as a layer of design inquiry, as a resource of multiple interpretations, as an inspiration for clarifying thinking about the relationship between architecture, landscape and ourselves.

Clues for unfamiliar qualities can be found by investigating the ways others have described places. These qualities can be spatial, perceptual and ecological. The problem is that 'some cases' is not sufficient if the world is a case:

'Structures are often too dangerous to save, and health and safety as well as economic priorities may dictate the direction of the redevelopment. Erasure is sometimes the only way forward for highly contaminated sites and developers may insist on starting with a blank canvas. However, in some cases there is the opportunity to arrange innovative and sustainable interventions. The reuse of materials, on-site remediation techniques, reduction in removal of waste and the enhancement of biodiversity.'

(Heatherington, 2012, p.183, in: Jorgensen and Keenan, 2012).

Regularity is controlled, determined. This, I believe, is one of the great values of abandoned space: the abandonment of control. It is, therefore, a place that is closer to the truth: the decay of materials, the growth of plants and social use express reality, nature and death. John Stilgoe speaks about unsupervised and undesigned places for children to have freedom, to create their own bond with the place (Stilgoe, 2015). This does not change when we become adults: we keep on traveling between certainty and uncertainty, as nomads (Cupers, Miessen, & James, 2002).

In Edensor's book 'Industrial Ruins: Space,

Aesthetics and Materiality' the author highlights two aspects of ruins that he considers unique: firstly, the fact that they are free from the authorities we normally experience within the city, or when we enter someone's land. Secondly, the materiality of the space is different: the place feels different, in such way that it opens up our senses. This makes it an interesting location for 'play.' Edensor describes how industrial space is socially produced and used, and how it can be seen as something other than 'waste.' In his rather post-modern approach, Edensor shows how abandoned places offer a new way of looking at the world and ourselves by wandering through these spaces. Playing and finding new perspectives go hand in hand: play helps us explore borders, to encounter difference, to carry out basic research (Edensor, 2005).

'Objects and structures that display the erosions and accretions of age seem conformable with our own transient and ever-changing selves'

(Lowenthal, 1994).

The built environment is always in a process of transformation. Nature is a dynamic entity. Nature has dynamic qualities that are in balance with climate and survival. This dynamic is characterised by the success or decay of flora and fauna. Everything in that system seeks survival. Inhabitants may, consciously or not, direct or intervene in the way change, growth and entropy happen. In nature, the human condition is part of the flora and fauna. Humankind's desire to shape, organize and control dominates: '**human dominatus**'. The human condition also exists in entropy, because humans may accelerate or prevent the entropy, conserving or hiding. Architecture rarely works with entropy as part of its design idea. Mostly, this is something we seek to prevent, something to deal with. Examples are: Robert Smithson, Nancy Holt, Debory Poem. One issue we can raise is that, given these conditions, design, the

process of producing, becomes more complex. Because design proposes artefacts, it is always about making, it does not define projects. It is a wicked problem. Intervention comes into play here. In that regard, it is always changing. It deals with complexity. To produce a good project with minimal design intervention, it is necessary to ask the best questions that will help deal with that complexity. That complexity is formed of shrinkage, entropy and nature. Purpose is dealing with shrinkage, is dealing with.

We must be aware of this complexity, as it is a kind of theoretical framework. In relation to the project, it helps us come up with the best questions. How can we assess this potential? The narratives that can be read from material decay are an entanglement of their user, nature and time. Robert Smithson showed, with his 'Spiral Jetty,' how the red hue in the water produced by algae was altered by the change of tides in combination with the composition of the land-art.

'In the ruin, what is missing and destroyed is replayed by something else, the remnant is unified with nature as it takes the place of what is lost and a new characteristic whole is created. This displacement where nature strikes back, so to speak, at the man/man, obtains both a comic tragedy and an element of melancholy'
(Braae, 2015, p.182).

Entropy is the decaying process of order into chaos that cannot be reversed or denied. In abandoned buildings, the consequences of decay transform the place into a ghost of our lives, an uncanny place, that is different from the order we normally experience.

This unfamiliar territory forces us to think and can make us look differently at objects and our

lives. The quality of material decay is that it contains a narrative of disorder and unexpected change. It demands that we are adaptive, it accepts us as imperfect. The material decay of a place relates to the former architectural intent, the process of time changing the material and the new interpretations that can be given to the changing configuration of the material. The term entropy is often used to describe how processes only become more complex and want to divide into chaos, over pace. Robert Smithson, in a conversation about the term, describes it as follows:

'With the becoming of time, only more chaos can come to existence, more "broken glasses". What makes entropy, also named the third law of thermodynamics, is the notion of the "arrow of time". If we watch a movie of a cup of water falling over, we understand that the spreading of the water must have happened after- the water will never jump from the ground into the glass. This process of constant breaking down, the metamorphosis of order into chaos. The difference between order and chaos is the inevitable direction of time that we as humans perceive. This is a realisation that this is a force we cannot control, that sooner or later we all will be subject to decay. Something that we might not be happy to be reminded of'
(Smithson, 1973).

Smithson accepted the 'entropic situation' and referred to it as a way to see architecture as the material and entropy the instrument.

Designers and architects such as Zumthor, Kahn and Pallasmaa, Marot, Christopher Alexander and Merleau-Ponty describe the specific design of buildings and landscapes. For example, Juhani Pallasmaa bases his six themes for the re-enchantment of architecture in his belief in the possibility of architecture 'grounding us in the continuum of time and in the specificity of place' (Lichtenstein & Schregenberger, 2001).

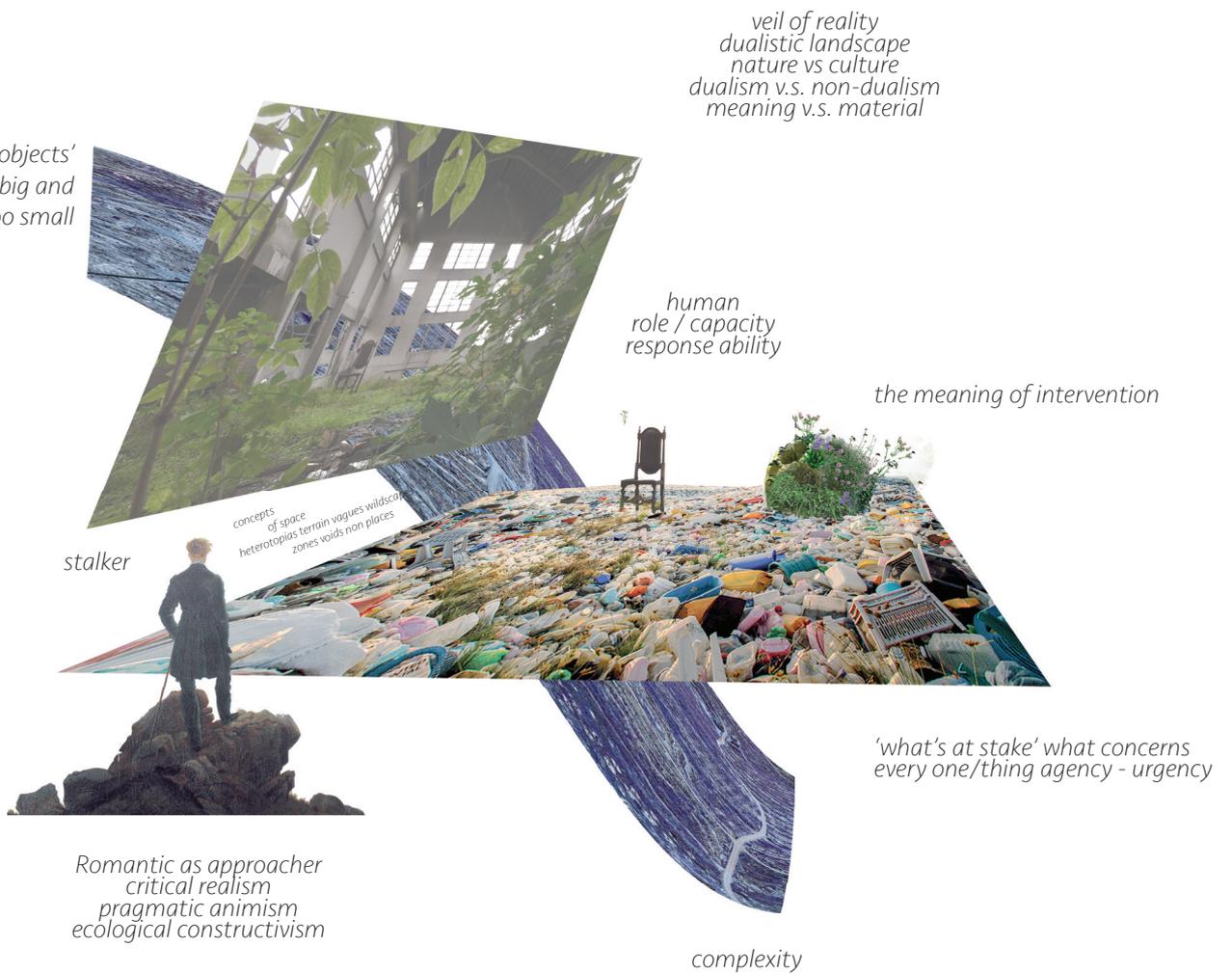


Fig. 26 Set up of questions and issues. How to deal with the complex assemblage of nature, landscape, hyper, anthropocene, subjectivity, meaning, action?

Can we look for these qualities in abandoned places, such as they exist?

At first, the abandoned building represents a model of a past life, like a *palimpsest*⁶¹ (see chapter 4, *Wandered*, page 111). It indicates a condition where layers of complex meaning are involved, where old layers can be rediscovered and give new meaning and interpretations (Koo, 2009). The palimpsest is a record of human history and presence. It is a tool for understanding ourselves, for feeling trust, identification, character, meaning. It creates difference between location and place, a familiar face to encounter hints of the spirit of the place, the 'genius loci'.

The sense of controlling existence through abandoned places can be called the psychotic sublime, understanding abandoned place as a space for a rediscovery of permanence: an eternal presence of existence through the absence of life (Featherstone, 2005). In 'The Aesthetics of Ruins,' we find that the abandoned place can be a guide in meditating on our own frailty and that of the world (Ginsberg, 2004).

The abandoned place, in this sense, is the readability of a presence, a human measure in the continuum of time, a permanence. In this light, the abandoned place represents a human scale of time and space. The human scale of time and space is defined by the state of architecture: its struggle against entropy. The architectural quality of the abandoned place expresses itself in the first place through this resistance: in the details of craftsmanship, erected walls, fierce constructions and geometrical images that contrast with its landscape. They are the human monuments that, in a broader sense of time, relate to

Stonehenge or cave paintings. George Simmel described the ruin as an expression of the power struggle between the will of the human spirit and natural processes (Simmel, 1906; 1911).

On the other hand, the act of architecture creates a human dimension in nature. The depictions land artists use to create a record of the landscape are also found in the architecture of abandoned places: walls without roofs create an enclosure and encounter with the sky, just like Robert Morris's land installation *Observatory* and James Turrell's *Memorial*.

The intentional placement of window frames in buildings are the remains of an intention, a human relationship with the landscape. Nancy Holt's *Sun Tunnels*, 1976, in the Great Basin Desert demonstrate this quality, as they point towards important transitions of the sun and the vast landscape in a submissive position against the timelessness of the environment. About land-art and landscape design projects I go deeper in the 6th chapter 'Emerged'.

Places of neglect already represent an out-of-context reading. The appearance of an unfamiliar territory can make us feel vulnerable and threatened. In the Apollonian way, we always seek to understand our environments, looking for comfort and clarity. The encounter with decay gives us a feeling of insecurity, which we tend to avoid.

For example, Piranesi's sketches of decaying monuments are more an homage to the passing of time than an attempt to wash away its consequences. Piranesi's work indicates that ruins are not static, and speak of other times, as well as the present. In his works, times and places overlap, suggesting that abandoned places are looser in time, allowing us to hover around past, present and future (Wilton-Ely, 1993). If we look at the follies in Romantic gardens, we see mock ruined monuments of

61 **Palimpsest.** A parchment rewritten over and over again. The traces of the past are still present. Often used as an analogy for the 're-writing' of the landscape. (See page 111).

past civilizations, exemplifying civilizations and their losing battles against 'the arrow of time,' which establish a non-dialectic relationship between humans and nature: none are bigger than time itself.

Nature might be driven by entropy, while architecture has to surrender. The Japanese tradition of Wabi-sabi embraces the process of entropy. When a pot is broken and glued together, the tradition is to regard the object as more valuable (Koren, 2008). The readable palimpsest of past narratives around the object make it richer in context and more unique. As a sensory experience, the architectural entropy of the abandoned place refers to temporal aspects.

In around 1400, the 'European man' started to look differently at space and landscape. Painters and writers explored the landscape. The common man was not afraid of nature but visited it again to understand himself and the world. From pilgrim to wanderer, and finally a tourist. Together with these cultural changes, the dialogue with nature changes as well, and, as a result, the way nature appears. In our current age, a new attitude towards nature and landscape can be observed. This is a coming together of a lot of different new developments that, from this viewpoint, are shaped by new technologies and globalization.

When looking for the origin of modern ideas, where they come from, we often arrive in the Romantic period. Not just because geography underwent great development during this period, or because of a clarification of the mystic experience of eternity, but also because the historical sciences came into existence through the nostalgia and emotion of the Romantic period.

In the image of the pre-Romantic period we can see a new understanding of the past. In particular, we see the ruin as the favourite image of the Romantics. As the image of their

understanding of time and history, it has been so greatly admired that in historical Romantic gardens, these ruins have been built from scratch. The ruin is a place that was once built by people and is now left to fall apart. It is the sign of a human presence, now returning to nature.

In this sense, the ruin refers to the notion of nature within culture: it is culture that will return to nature, after she has tried to protect and sustain herself. The ruin is the failure of culture, the 'tragedy of culture.' For that reason, as Ton Lemaire (1942) writes, the ruin is the symbol of the Romantic preoccupation: the romantic dwells on the border of nature and culture, that border, where culture and nature touch. With that approach, the Romantic becomes the first philosopher and critical thinker of nature, speaking critically about nature from a natural viewpoint. Romance is full of death – and in the confrontation with the abandoned, the past, the visitor sees the mirage of their own absence.

The ruin opens up to time, because as the dweller leaves, they represent a shift in time between culture and nature. We are allowed to see our presence as past in the future – the ruin becomes a place where different dimensions of time overlap. And it is this perspective that is fundamental in the experience of modern time. This coming and going is simultaneously the enemy of the modern experience of time: human existence is inferior to the circle of life, in the way it will be taken and given, over and over again. These Romantic ideas about death come from the Medieval "memento mori" (Lemaire, 1970).

'The third landscape – an undetermined fragment of the Planetary Garden – designates the sum of the space left over by man to landscape evolution – to nature alone. Included in this category are left behind (délaissé) urban or rural

sites, transitional spaces, neglected land (friches), swamps, moors, peat bogs, but also roadsides, shores, railroad embankments, etc. To these unattended areas can be added space set aside, reserves in themselves: inaccessible places, mountain summits, non-cultivable areas, deserts; institutional reserves: national parks, regional parks, nature reserves.'
(Clément, 2004, p.48)

Because these places are not approachable, they become places that can work as a genetic reservoir for the planet, spaces of the future. They allow for biodiversity and speak of an honest experience with time. Clément therefore states that designers should always keep a place in their design that is unprogrammed, open to the future and to spontaneity. This is, of course, on the basis that spaces will be used in the future. It includes space that can be produced through its use.

The nature of the third landscape, I believe, is very much in line with Kowarik's new wilderness. It is just more designed and happens this way deliberately. Kowarik, as a planner and ecologist, looks more at the nature that emerges in abandoned places, where Clément creates new places for a new nature to emerge.

Why do many conventional approaches seem to fail, and why is there a growing concern for problems for which it is difficult to define cause and effect – which have a high level of uncertainty and can never be solved once and for all? Problems that will never fit a model and always depend on their context? The danger of post-humanism is that of it becoming a fascistic way of loving nature (Vicenzotti & Block, 2018; Jørgensen, 2015; Kowarik, 2018; Lorimer & Driessen, 2014; Lorimer et al., 2015; Prior & Brady, 2017). This change in the environment means that we can define several concepts for determining nature. Some speak of a second nature (Tsing, 2015), a third landscape

(Clement, 2015), a third space (Soja, 2008) or Wildscapes (Jørgensen & Keenan, 2012). Those concepts helped to formulate a fourth layer within the landscape, linked to a new wilderness. This determinism is not meant to define nature as one of those four layers: the truth is that all those layers are happening at the same time, through many micro and macro cosmos-communities.

In the next image, we can make a division into four types of nature, or certain layers (fig 27). I borrow Ingo Kowarik's explanation of the four natures's main framework, since many other concepts can also fit into this work – most interestingly the 'layers' approach I was taught in Delft. The idea that nature is an opposite to human alteration is an illusion in the first instance. But let's first see the four different ideas of nature.

First nature is concerned with the nature that emerged on earth by itself, never touched by humans: pristine nature, in balance with itself. We can imagine a novel landscape, one that just came into existence through volcanic activity, where pioneer plants emerge on their own. We can also imagine a rainforest that is a testimony of life itself.

Second nature is everything that has been altered by human activity, from forest burning to agriculture. Scientists link the Neolithic human with the Holocene, thinking that the stable climate in that time was also linked to the entanglement of human settlements and nature. This cultivated layer is where human manipulation leaves a significant trace on the earth. However, this is limited to usage for human survival, linked to the emergence of agriculture. It is the pre-modern layer, and nature existed but it was never really necessary to separate ourselves from it, apart from the fact that it is more powerful than us and was a source of fear.

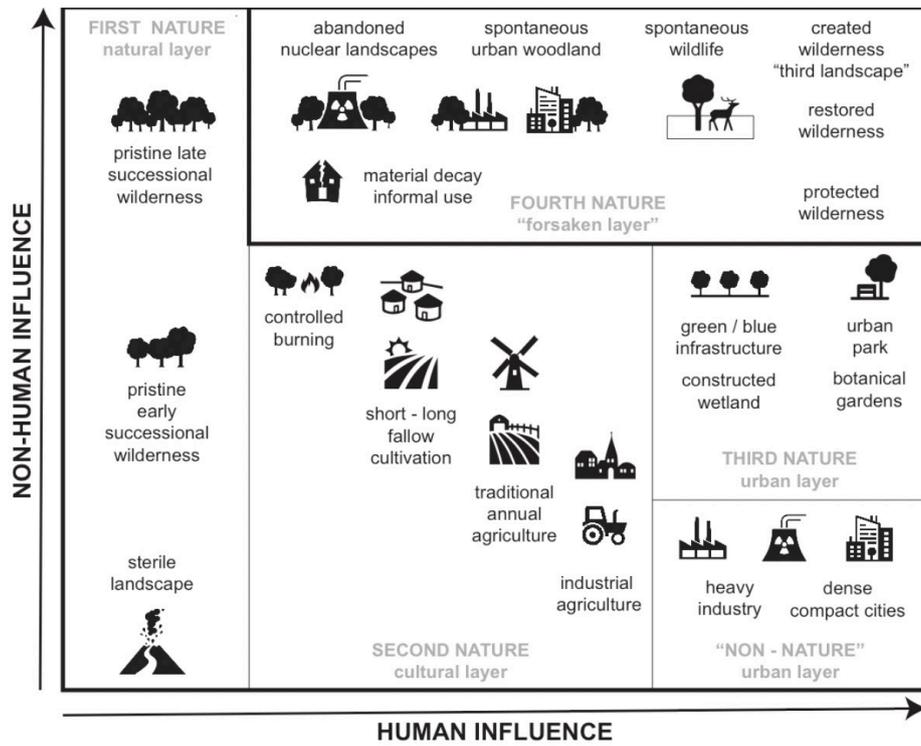


Fig. 27 *Overview of nature types.* Matrix positioning types of nature and new wilderness (based on concepts and info from: Kowarik, 2005; Cantrell, Martin and Ellis, 2017, p. 158-159)

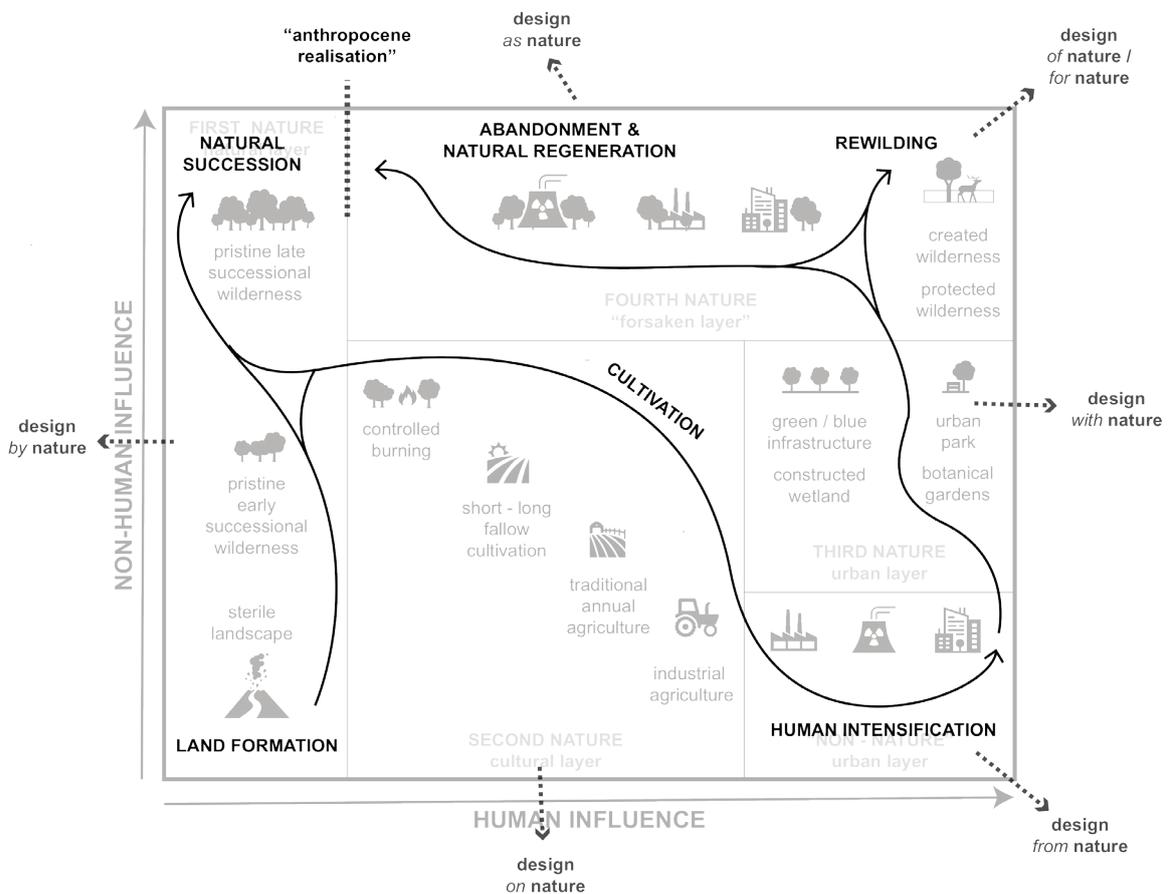


Fig. 28 *Imagination of design actions connected to nature types.* Matrix positioning types of nature and new wilderness (based on concepts and info from: Kowarik, 2005; Cantrell, Martin and Ellis, 2017, p. 158-159)

Third nature is associated with the discoveries and the industrial revolution, where nature is seen as immanent resource. This is also where the modernist approach appeared. With this type, we can see nature as something we want to learn from, as well it becoming a main source of consumption (see 'the change of journey' page 104).

In **Fourth Nature** we have become detectives of our own crimes, not knowing how to run or act. In this layer, there is no longer any real understanding of nature and humans. Both have been altered, but so long ago, it becomes unclear who altered what. This is the Anthropocene monster we find in the Southern Reach trilogy (VanderMeer, 2014) – the other becomes us. If we look at our direct environments, these places do definitely exist. Any abandoned place is like that. What is new in relation to the fact that these places are in our direct environments so much now, is that they are evidence of the Anthropocene. They inflict a new view on the world, the '**Anthropocene Realisation**⁶².' Nature will never go back to the pristine natural layer that we believe everything stems from. The definition of the fourth layer is that there is no real division between the other layers anymore. The idea of trying to understand the landscape as an overlap should be avoided. But how would a design work in such a way?

Natural succession begins with pioneer plants, opportunist annuals and perennials giving way to taller herbs and grassland, before scrub and woodland take over.

What makes abandoned spaces so different from green parks is that they are rich with 'new wilderness.' Without human control, they mix and compete with each other. Spontaneous

ecologies also continuously produce new species or combine into new bio-topes. In the early 1970s, ecologist Herbert Sökopp demonstrated that new ecological conditions and biotic communities can be established in man-made environments where the original ecosystem was destroyed, and many species had become extinct (Sökopp, 1979).

This reservoir of spontaneous ecologies is an experimental field where 'climate conditions, soil formation and vegetation succession' can be studied and 'possibly new and well-adapted ecotypes' can be formed. Ecological processes in abandoned places show that nature evolves in a more dynamic and complex way than we could imagine.

Many wildlife species, including insects, are small and have small home ranges. Even one native tree can offer significant food and cover. For some species, a scattering of trees in a neighbourhood can be an important resource for food and shelter during migration and wintering seasons. Many bird species will forage within small tree patches across a city that could also serve as a stopover habitat (Dawson and Hostetler 2010).

Neglected places and undetermined *in-between spaces* can be seen as 'terrains vagues' (de Solà-Morales, 1995), among other things. I aim to compare the site visit against qualities that were found (through site visits and literature review) in other Anthropocene monsters, such as abandoned farms, industrial buildings, churches, military constructions, villages, hotels, civil structures and large public buildings. In short, meeting the monster comes down to an awareness of the following three concepts, which are often overlooked in our intensely designed environments.

It is through emergence that new relationships between existing beings and objects can be created, encountering and contaminating each

62 **Anthropocene Realisation.** The realisation that the majority of our environment is touched by and entangled with human presence: there is no pristine nature.

other. Landscape architecture enables the trees and fields to develop a new condition that was not initially meant in the design. Open systems create novelty through the emergence of new relationships. Pure novelty has never existed. The difficulty of being open to novelty is being in a place where uncertainty and indeterminacy is not tolerated.

5.4 A FORSAKEN LAYER

I suggest to make room for a 'forsaken layer,' with Anthropocene Monsters as a follow-up to the natural, cultural and urban layer (Bobbink and De Wit, 2006) or a 'New Wilderness' (Kowarik, 2005) giving form to the challenges of the 'Third Generation City' – or landscape – where a new balance must be sought between ecological and social values (Casagrande, 2013). In this sense, it is more of a decentralizing, post-colonist approach towards space (Fig. 22). Looking at the overlap of these different aspects, I would like to focus on three points that bring the different concepts together:

In abandoned buildings, the same kind of indexing might happen, and time can be expressed in two ways: (1) by the reconstruction of a memory of what once was; and (2) the way the de-contextualisation of material expresses the arrow of time. We can fantasize about the former life of the place, the inhabitants of the abandoned house, trying to reconstruct a setting with the traces that we find. Then, a crack in the pavement can give the sense of inevitable change, that our daily lives are deciduous, and not as self-evident as we might believe.

Another quality of material decay is the fact it keeps the shape of old spaces, at the same time as it creates new ones. The palimpsest of the place has a direct impact on its users. In entering an abandoned site, we will most likely pass along the place's existing paths, entering

existing doors, being shaped by the original architectural intent of the space. Places are in a constant process of becoming, always turning into something new, where architecture is the material and entropy the instrument.

Georg Simmel (1911) suggests that the decay of architecture can be seen as an opposition to the will of shaping: human structures will never conquer the process of a ruin. Immanuel Kant's concept of 'natural beauty' outlines a difference between artificial and natural beauty. Very much in line with Simmel's idea, it implies the natural quality as an inevitable and uncontrollable force, always present and impossible to forge.

The remains of the architectural intervention create a relationship with nature that is similar to that of the garden but with one difference: instead of capturing nature in a human form, it embeds the human condition within the natural. The abandoned place can be seen as the reverse of the concept of Total Design. The natural quality of the abandoned place opposes the totalisation of design into the entire world of human existence, where all architecture becomes interior. Through the abandoned place, the exterior, the other, assimilates the interior and becomes readable in an odd language of the interior. The in-between gives designers different attributes to work with:

An 'unfamiliar' experience partly consists of known patterns, but innovation through entropy shapes something unexpected. The displacement of everyday objects in non-rational ways contributes to a 'material psychosis,' a sense of otherness in the shape of the known.

This is expressed by the way plants grow over human structures or everyday objects, which are suddenly are broken in a disturbing way. Embracing the imperfection of the forsaken becomes 'a means to critique the over-regulated way contemporary urban space is formed'

(Edensor, 2005, p. 41). It can also help us become more empathic towards the unknown.

Another quality is its rather brutal character, inflicting a new attitude on the designed environment in terms of embodiment and social rules. It provides us with a sense of freedom, a place of possibility and therefore hosts all different kinds of play – from the destructive, hedonistic or artistic to adventurous and exploratory play (Edensor, 2005). For independence and individuality against the powers of society, a true public space would be the playground where we can explore borders (Simmel, 1903). In this sense, forsaken land gives us a place with ambiguous borders that are an exploration in themselves.

Time textures are the material effects of weathering and entropy on material, making long-term processes visual or tangible. Simultaneously, it creates an image of past lives, and is the understanding of an ongoing palimpsest, understanding place as an ever-evolving context. This evokes a feeling of temporality and authenticity, expressing the *spirit of the place* (Norberg-Schulz, 1980). Decay also impacts the overall morphology and flows of the architecture, resulting in a labyrinth brought to life by time. This grounding within the continuum of time and space evokes a feeling of being part of something bigger: Kant's *sublime*.

We could see abandonment as a part of ourselves, something that we created, and that we should embrace. Latour asks us to 'Love our Monsters.' In the same article, he argues that Dr Frankenstein's real sin was not the creation of the monster, but the fact that he abandoned the creature (Latour, 2011). In Mary Shelley's classic novel Frankenstein, the monster himself states that: 'Misery made me a fiend.' According to Ulstein, it seems that the new weird is not so much about monstrosity itself, but more about researching, understanding and embracing the

monster.

Perhaps there has been an opportunity to let this need for order and control go. Maybe attract the monster. In 'A cautious Prometheus,' by Bruno Latour, the author discusses the idea that design makes things, from objects to cities and landscapes, attractive to nature itself. This also signified the start of an interest in the eco-political understanding of design (Latour, 2008).

Next to practical beliefs, I have gleaned from the literature of the abandoned place that the aspects that are often overlooked are the very qualities of the place itself before something new is projected on it. These are:

- the aspects of entropy and how it prepares us for change;
- spontaneous vegetation and how it prepares us for emergence;
- a place that does not carry many social rules and therefore encourages our creative thinking;
- the uncanny otherness of abandoned places and how it prepares us for adopting otherness into our lives.

Being aware of these aspects, where change, creativity, otherness and the embracement of failure and emptiness are key words, I believe they are of great value within those spaces and should not be overlooked. To arm our minds for the Anthropocene scenario of chaos and crisis-framing, these places, or at least their qualities, could remain within our worlds. The real quest would be to see their value in the first place, and after that, find a way to frame them.

CONCLUSION: LOVE YOUR MONSTERS

A plea for seeing value in the imperfect, undetermined and decaying

Looking into the overlooked, that which has been neglected, and often rendered valueless, can teach us about blind spots in our sterilized understanding of the world. To become acquainted with the unseen, an optimistic response to the mess, garbage, decay, entropy, chaos and death of 'virgin landscapes' is sought, without denying or disassociating from them, but by giving them a place in our hearts, allowing ourselves to learn from so-called failures, rendering us resilient and adaptable to the future.

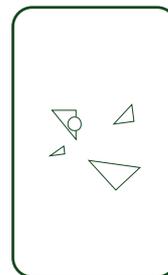
The landscape can be seen as a plane of difference, in which no place is ever the same; ideas are ways to categorize places for our simplified understanding. Being critical helps us become free from concepts. By looking into several perspectives on ambiguity in space and landscape, we see that places are entities in themselves, partly invisible and ungraspable. Within places, new 'worldings' emerge constantly, often set up by different actors. Seeing these processes as a genuine character of place, the designer's ideas of what the space means are not what leads it; it is led by experience through senses, time, cultural framing and possible ways to interact with place.

By looking into the undesired parts of ourselves and landscapes, we become open to new perspectives in relation to larger scales, time and space. Thinking spatially and being critical helps us test ideas and projections with space as a playground. This on its own is a practice that creates possibilities and room for emergence. Looking from these different perspectives allows us to see unconsidered, overlooked latent qualities in the space. We

could list these qualities again – or let them go. The most important thing is that we attempt to understand the undesired, the place, with curiosity and not as a problem. By loving our monsters we come one step closer to looking with fresh eyes at the things that make us unhappy. Forsaken places are places of criticality on their own: they tell a different story and invite us to learn about new realities.

Finding a way to make room for the parts of ourselves that scare us – we might learn to accept the less desirable in the spaces around us too – and vice versa. The designer and researcher have to find the compassion not to judge imperfection and incompleteness. This begins with the way they experience and respond to their own imperfection and incompleteness. Only with acceptance of the self can visitors feel comfortable being reminded of less desirable constructs of themselves in the world around them. Loving our monsters goes hand-in-hand with a playful approach to the inner as well as the outer landscape and can result in seeing abundance in the abandoned. Paying attention to the neglect within ourselves makes us kinder.

Love your monsters. To find compassion for the world around us, we must also look lovingly at (the result of) our creations, whether they are a presentation of our 'shortcomings' or not.



SCATTER

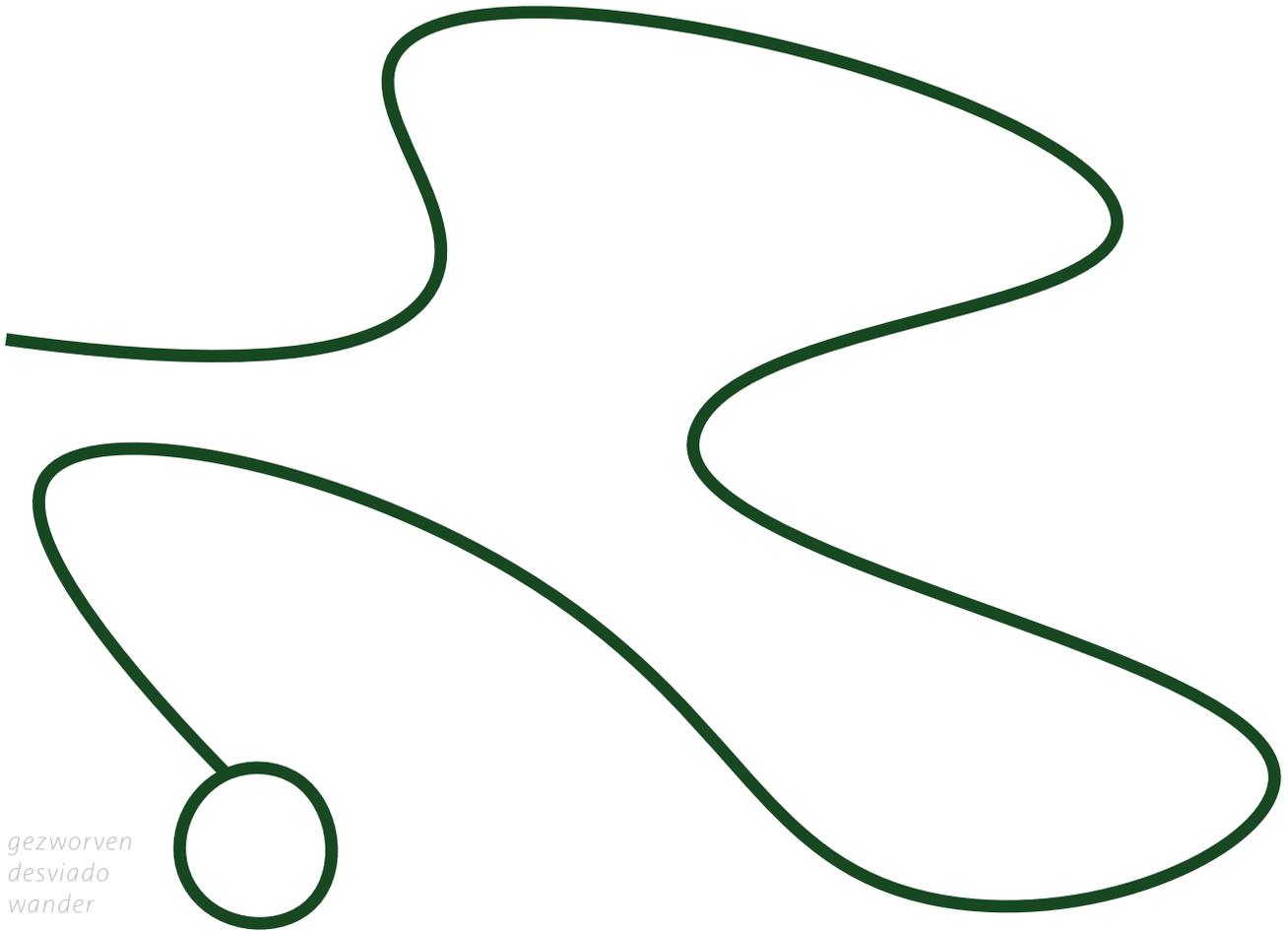
be free to
interpret
concepts with
visualization
/imagination

make concepts
readable to
your younger/
older self

concepts
are language:
play with new
articulations

imagine
concepts in
another galaxy.
imagine how
would they
unfold?

use other
perspectives to
acknowledge
multiplicity



gezworven
desviado
wander

verb

1 you can spend the afternoon wandering around the estate: stroll, amble, saunter, walk, dawdle, putter, ramble, maunder, meander; roam, rove, range, knock around, drift, coast, gallivant, gad around, prowl, mill around; trek, trudge, stretch one's legs;

2 he had wandered away from his friends | we are wandering from the point: stray, depart, diverge, veer, swerve, deviate, digress, vary, drift, get separated, get sidetracked

3 the child wandered off when we weren't looking: get lost, lose one's way, go off course, lose one's bearings, go astray, go off at a tangent.

4 the narrow road wanders along the foreshore: meander, wind, twist, turn, curve, zigzag, bend, snake, worm.

noun

stroll, amble, saunter, walk, roam, meander, dawdle, putter, ramble; gallivant, prowl, drift, maunder, promenade, constitutional; turn, breather, airing, trek, trudge; informal traipse, mosey, tootle; British informal mooch; rare perambulation, peregrination.

(Waite, 2009).

of the site can be told through the unintended encounters of the moment. This can also be described as inventive analysis: the sense of place can be experienced by literary sensing the place. By breaking the rules of the site, rebelling against the laid paths, new layers become visible. Places that are abandoned, vague or wild are more open to spontaneity and in this way help us critique the values we have shaped in everyday life.

In challenging the meaning of sites, designers thus have an obligation to disobey. During the last two years of the PhD, I travelled to European cities and countryside. On my travels, I came to understand the meaning of abandonment and the different ways in which municipalities have dealt with it. Abandoned places contain qualities that can be seen as the architectonic layer of the Anthropocene landscape: studying them from many perspectives is one way to approach the problem. This chapter is a description of this adventure, from which I ultimately extract some key points.

This chapter, originally written as a 'report,' is a condensation of the different places I visited during the PhD. This is a synthesis of literature, meeting academics, professionals and locals, and visiting sites that would be used to project the intellectual journey I was pursuing. In this chapter, I focus on the meaning of unexpected encounters through space. In Creswell & Poth (2016), we find five qualitative approaches to inquiry.

They are narrative research, phenomenological research, grounded theory research, ethnographic research and case study research. Looking at this thesis as a whole and this chapter in particular, grounded theory research is in the lead, while phenomenology, case studies and narrative research share second place, resulting in mixed methods research (Cresswell, 2012; Tashakkori & Cresswell, 2007).

Figure 30 demonstrates the cities I have visited, the key people I have met and the concepts that guided my thoughts at those moments. The evidence for these works can be traced through the decoding of personal notes, interviews, photographs and sketches. These notes are kept in an archive. In the following paragraphs, I will discuss the most significant sites I visited, the ones that contributed to the story from the inside out. The time-line can be seen as the set up for mapping the experiences in grounded theory approach.

6.2 THE ACT OF WALKING

Linking personal experiences with site visits, conversations and encountered literature can act as a leading narrative for structuring a thesis. In my case, this involved the grounded theory approach (Strauss & Corbin; 1998; Glaser & Strauss, 2007) and on-site inventive analysis in landscape architecture, based on the work of Bernard Lassus and Lisa Diedrich's 'collective case study' (Lassus, 1998; Diedrich, 2013), collecting data by regularly visiting abandoned places in Portugal, through meandering 'travelling transects' (Braae, Diedrich, & Lee, 2013). This qualitative inquiry is a collective case study helping us to understand overarching elements of abandoned places as well as bridging theory with practice.

The importance of the act of walking, 'becoming place,' and repeated site visits are present in grounded theory and in inventive analysis. The sources of this study consist of:

- Visual material: pictures, drawings, maps, sketches;
- Textual material: literature, websites, notes;
- Site visits: exploring the sites on foot, alone and with others;



Fig. 29 *PhD data inquiry.*

Inquiring local knowledge. Public board showing abandoned places and doing walks with locals.

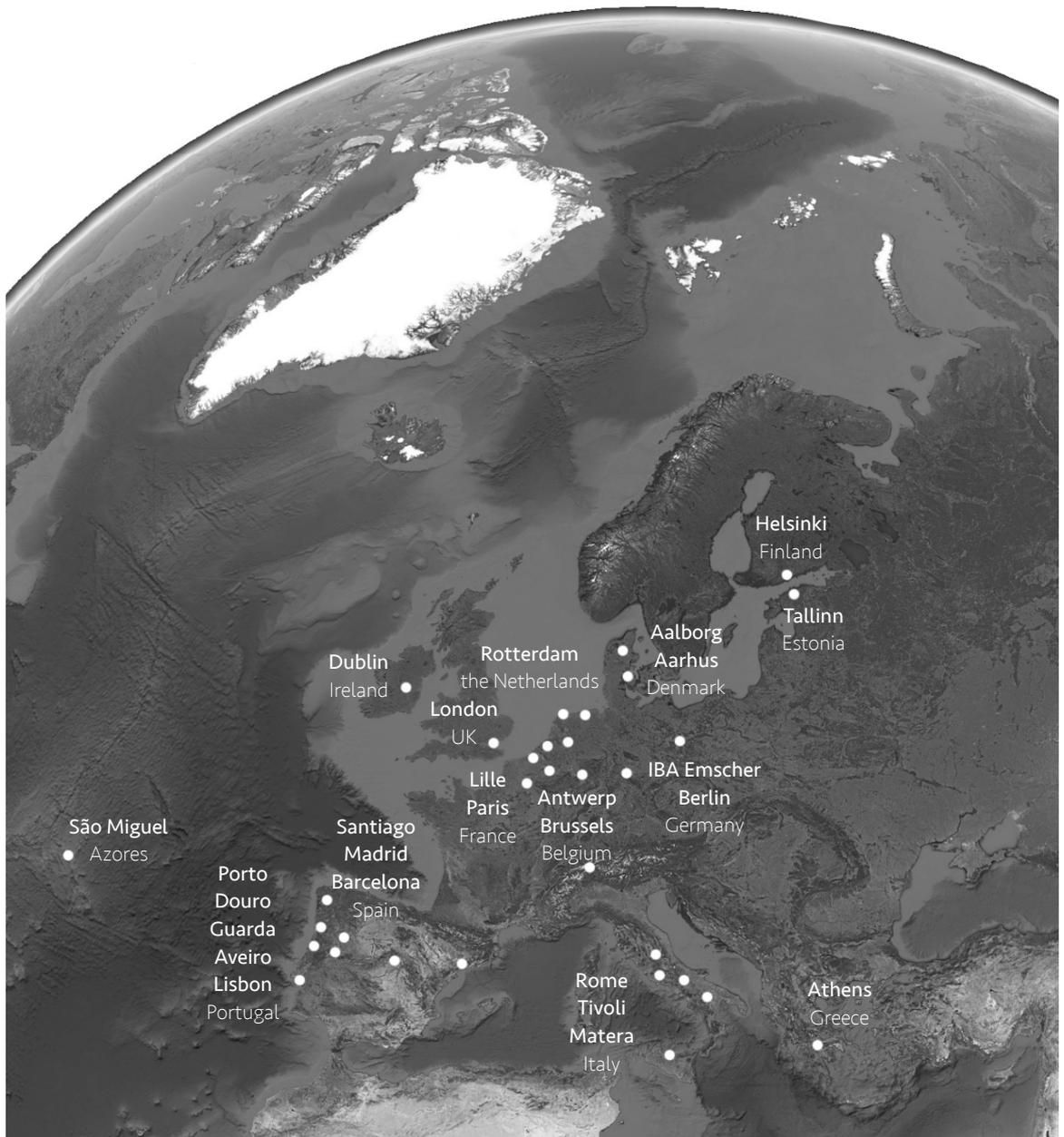


Fig. 30 *Journey map.* The most significant places visited during the data collection. In those cities, the read concepts and ideas have been put in dialogue with spaces in the locations.

- Conversations about the ongoing topics with others.

Abandoned places, filled with 'Anthropocene matter', overgrown and trampled by human and non-human visitors, where human visitors are questioned in their role towards the environment, as well as challenged in contributing to the way design can contribute to their work: how can we understand these abandoned places? Can we find existing concepts to help us see those ruins, to understand them as designers, spatially and phenomenologically? What role do we have as wanderers?

6.3 DYNAMIC HYPOTHESIS

Grounded theory is the constant balance between inner experience and understanding the environment around us: from trying to see what others are saying (literature, visitors or projects) to finding my own voice in the story. This report is the residue of a mapping of the sites and people involved, figuring out the key issues at sites of publications. This mapping can relate to the key words in the research. Ultimately, I will discuss a glossary of terms that are important concepts and words relating to projects I have chosen at the various locations: the 'second synthesis' of all the materials.

The idea is that this exchange of knowledge – in person, on site, combined with discussions on the state of the art – will allow us to map the bigger picture of this research, and to experience the idea of entanglement and contextual contamination. It is about making a 'big enough story' to find ways to relate to the micro and the macro – by submerging into the field. Because we are talking about space and perception, the idea of phenomenology is a strong presence in this chapter. How can we make sense of the large amount of experiences? How do we make

sense of the large amount of information?

There are certain themes we can seek, as a form of pivot, vehicles for thought that have mobilized the research. These pivots can also be seen as a conviction in the research, an inner desire to move in the first place. We can only unravel this pivot through experience: using space as a way to think. The research is not led by its outcomes, but the outcome is a result of the discovery of the motivations and impacts of the research.

The idea of this journal is to unravel those pivots, and to extract the lessons that are learnt by going through certain experiences. In this process, it is essential to have the ability to live in openness and uncertainty: to wander. This is a privilege that is given without prior understanding, and only through time do we learn the lessons it has to teach about dealing with complexity and responsibility.

We realize that we can only work with what we have, what we can find within our reach, and that every work is contextual and a representation of an angle in that context.

The idea of the sublime, the beautiful and the picturesque, formulated in the 18th century, is closely related to the emotional connection between the outdoors and the spectator. A questioning of the environment that evokes a certain way of thinking or perception is called the episteme of phenomenology. Visiting places and using the experience of that visit as research-dialogue fits into this line of thought.

As Simmel states in 'The Metropolis and Mental Life,' the way the outdoors and behavior are set up has a direct influence. The most profound problems in modern life stem from the individual's attempt to maintain the independence and individuality of their existence against the sovereign powers of society, against the weight of historical heritage and the



Fig. 31 Images of places visited (Portugal). By Author.



Fig.32 Psychogeographic notes. Drawing of the Ilhas in Campanha, informal settlements along the rail tracks of the Douro.

external culture and technique of life (Simmel, 1903).

Given that we are talking about our environment as an entity, why not see it as a genius we can meet? It is interesting to think about how much we see of ourselves in the world around us. A psychologist does the same when he sees a client. There must always be some parts that we fill in for the other, consciously or not. This is the same as the way we project ourselves into what we see in the environment. What would a psychology session with the environment be like? And who is the actual client?

We could look at abandonment as something that is part of ourselves, something that we created ourselves – and which we should also embrace as part of ourselves. Latour calls on us to ‘love our Monsters.’ In the same article, he argues that Dr Frankenstein’s real sin was not the creation of the monster, but the fact that he abandoned the creature (Latour, 2010; 2011). Our fascination with our own image everywhere around us might come from a deep insecurity of the self: the sense of self starts to become unclear, and we are obsessed with attempting to grasp its meaning –

it presents us with a dilemma: who, or what is this ‘Anthropos’ that causes the Anthropocene? Its effects are overwhelming, the visitor experiences the sublimity of the hyperobject that is entangled, set in motion by the individual. The myth can work as a realization that we should look up – or see our own reflection in the context, and influenced by the mirror. It is therefore an opportunity to learn about the other, and to look critically at ourselves. To look at the otherness within ourselves, while looking at the ‘us’ in the other. The term ‘transference,’ described by Sigmund Freud, indicated that his clients saw him as a strict father or a loving brother. They would react differently towards him. Initially, he saw this as a problem, but later

he saw this as a way to find out more about the other person – does the client use the same techniques to shield themselves from others, or do they walk away when they don’t get what they want?

On the other hand, the therapist has their own transference in relation to the client. This idea has been a source of controversy: ‘to work and to love’ as two different ideas. But is there a difference? This essentially uses hermeneutics as an advantage. *Psychogeography*⁶³ has an interdisciplinary nature that allows crossovers with many broad academic fields (such as art, performances, cultural studies, geography, social history and politics).

‘The study of the specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals.’
‘[The] active observation of present-day urban agglomerations.’ *‘Cities have psychogeographical contours, with constant currents, fixed points and vortexes that strongly discourage entry into or exit from certain zones.’* *A psychogeographer is ‘one who explores and reports on psychogeographical phenomena.’*
(Debord, 1958, p.65)

We can describe the practice of the psychogeographer as a way of questioning and noting the rules of the space by tapping into his or hers own experience and perception. Challenging our existing biases, informed by our spatial surrounding, is a form of disobedience. With the help of psychogeographical practice, we find new ways of apprehending our surroundings, seeing something new and unexpected. This can be done, for example, by

63 *Psychogeography*. Literary: geological mapping with graphics with inquiry through the psyche.

wandering aimlessly through cities or by using a game that creates irrational paths. The idea of wandering is a way of researching: going irrationally to multiple places. This different way of walking is the practice of *'dérive'*.⁶⁴

In 19th-century Paris, the concept of the *flâneur*⁶⁵ involved learning something of the complexity of the city, composed of multiple subjective distortions, by following an irrational path. With actual site visits, the act of walking plays an important role in becoming part of the dynamic change in the environment, where different modes of exploration, flow and reflection contribute to the design process.

'For the perfect flâneur, for the passionate spectator, it is an immense joy to set up house in the heart of the multitude, amid the ebb and flow of movement in the midst of the fugitive and the infinite. ... The lover of universal life enters into the crowd as though it were an immense reservoir of electrical energy. Or we might liken him to a mirror as vast as the crowd itself; or to a kaleidoscope gifted with consciousness. ... He is an 'I' with an insatiable appetite for the 'non-I,' ... rendering and explaining it in pictures more living than life itself.'
(Baudelaire, 1863, p.9)

Often, however, we might be moved by the invisible forces of a place, such as tourist traps, and we feel an urge to walk up and down, or to follow other people. It is a question of free will:

64 *Dérive*. Literary: drift, movement. A flowing experience.

65 *Flâneur*. A French noun referring to a person, literally meaning 'stroller', 'lounger', 'saunterer', or 'loafer', but with some nuanced additional meanings (including as a loanword into English). Flânerie is the act of strolling, with all of its accompanying associations. A near-synonym of the noun is boulevardier. Traditionally depicted as male, a flâneur is an ambivalent figure of urban affluence and modernity, representing the ability to wander detached from society with no other purpose than to be an acute observer of industrialized, contemporary life. Website: <https://en.wikipedia.org/wiki/Fl%C3%A2neur> Accesdate 20 September 2020.

our lives, languages, cultures and thinking are influenced by our environments. Space is often a way to order our thinking, and, above all, to order other people's thinking.

These *dérive* practices help us look differently at space, by dispatching us from those powers. The Situationists⁶⁶ tried to be aware of how their surroundings could be used to draw them toward the past. In that way, psychogeography could also function as an important connector between landscape and the palimpsest – as the reviver of an undermined or washed landscape. In grasping the qualities of the 'terrain vague,' psychogeography might prove itself to be an interesting method. However, how do we give significance to such subjective meanings? To understand phenomenology, one has to practise it. At the same time, I started writing a travel guide to Porto for tourists – which was the exact opposite of what I was searching for. However, I believed I could learn something from it. It helped me look differently at places. Most people want to see the most predictable places, to consume and to feel safe.

66 *The Situationist International*. The situationists waged war on what their dominant figure, Guy Debord (1931-1994), termed the "society of the spectacle," a society where individuals were passive consumers of art, leisure, education, and politics and were separated from the product of their labor. The spectacle was "diffuse" in the case of Western liberal democracy and "concentrated" in the authoritarian communism of the East. Debord and his comrades aimed to construct a "situation," defined as "a moment of life concretely and deliberately constructed by the collective organization of a unitary ambience and a game of events" (p. 13). The "situation" was a moment of intensity that broke with the drudgery and illusory pleasure of everyday life, a moment when the spectator became a subject of history and created what another situationist theorist, Raoul Vaneigem (b. 1934), called the "poetry of acts" rather than the "poetry of words." "Situationism ." Encyclopedia of Modern Europe: Europe Since 1914: Encyclopedia of the Age of War and Reconstruction. Retrieved August 13, 2020 from Encyclopedia.com: <https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/situationism>.

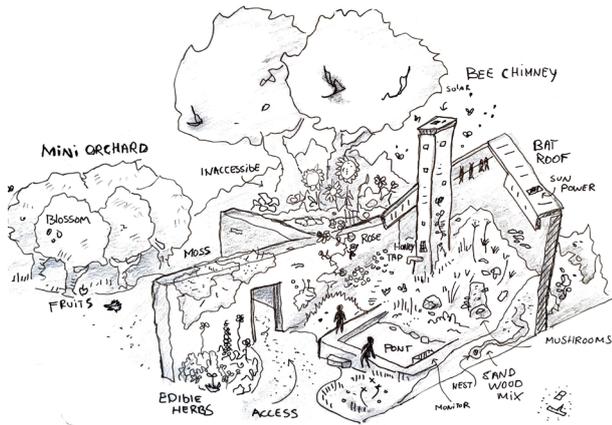


Fig. 33 Field impressions - as found. Photos of travelled transects that have challenged thinking about spontaneous nature, decay, uncanny experience. Design ideas were 'thrown' at the places in respect to the literature and spatial concepts found.

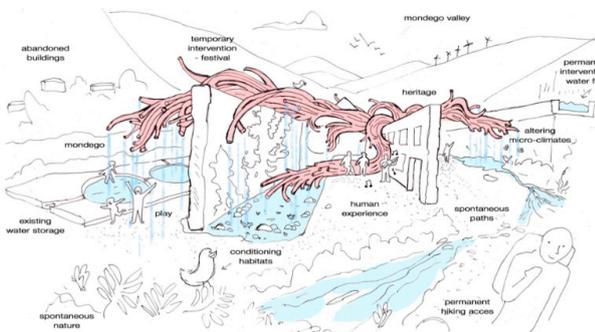
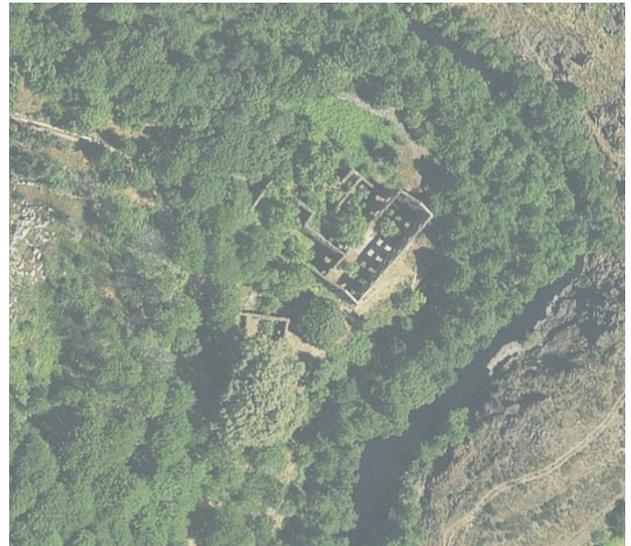
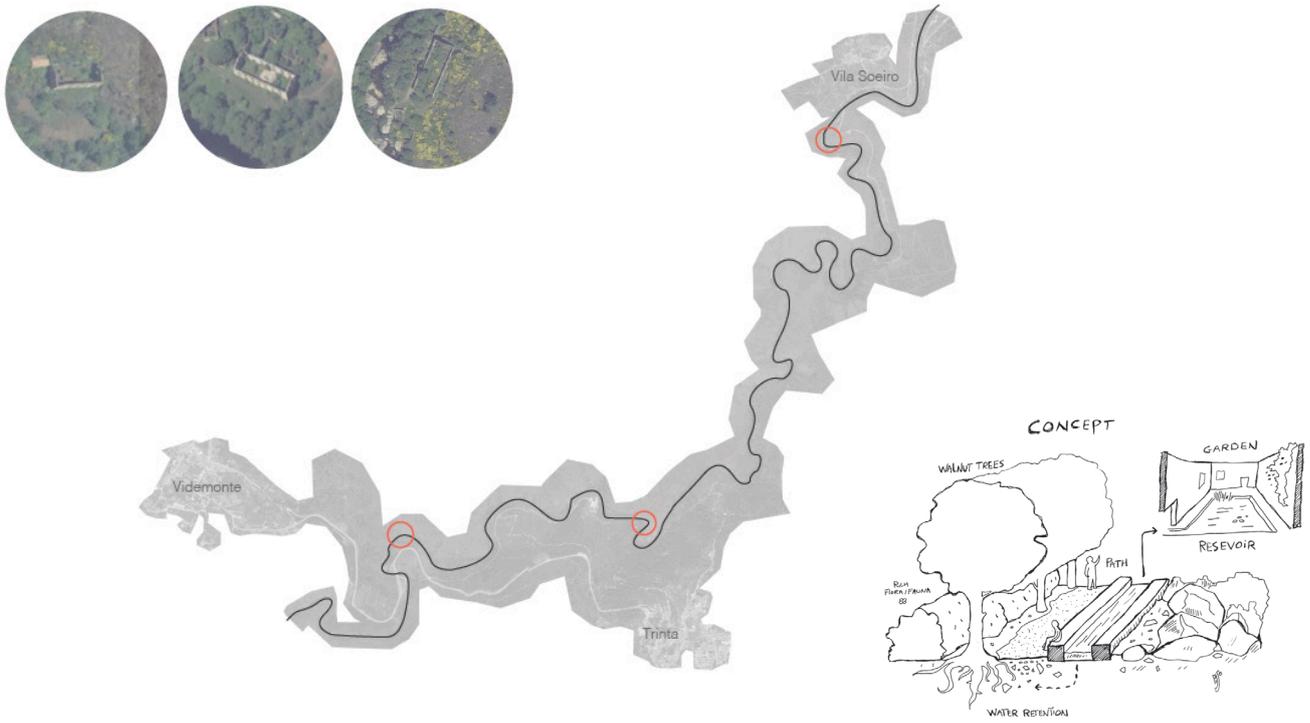


Fig. 34 *Field impressions - as found.* Photos of travelled transects that have challenged thinking about burglar approaches, microclimates, informal use.

Along with many photographs, writings and sketches, I have also been making mental maps. Inspired by the book 'Psychogeography,' by Merlin Coverly, I have travelled by wandering through spaces, playing games of discovery and making notes of my visits along the way. Relating my steps partly to the framework of understanding of abandoned spaces, partly allowing my experiences to forget everything else, I tried to understand what was happening in those places (Coverley, 2006; Smoth, 2010).

In Psychogeography, the authors express an appreciation of how the subjective, personal experiences of the environment collide in a kind of mapping. The interesting thing about this mapping is that it actually embraces the subjective reading of places. Kevin Lynch drew 'mental maps' of the city in his seminal publication 'The Image of the City' (1960). These maps were based on interviews that probed the perception and mental representation of the urban environment by citizens.

Lynch held that these mental representations, along with the actual city, contain many unique elements, which could be understood as a network of paths, edges, districts, nodes and landmarks. Lynch complemented his maps with photography and drawing, in order to articulate the citizens' perception and mental mapping. Consequently, Lynch defined design as intervening in the mental maps of citizens. In his view, the designer should work on the categories of paths, edges, districts, nodes, and landmarks to make the city more legible (Appleyard, Lynch, & Myer, 1964; Lynch, 1960).

Wandering into a journey and going to neglected places, while remaining open to their manner, is an unlearning of the architectural paradigm of shapes and domination. What is the architect's role and how can they define that role in a place of multiplicity? Unlearning helps us ask questions such as: which assumptions are no longer useful or valid, and what models or ways

of thinking do not fit the problems of today? The world we inhabit is dynamic, which is something we always have to deal with. However, we often do things because that is our habit. Often, we cling to existing manners just because they are tradition, the known. To unlearn is to let go of what you know and to leave your comfort zone. My own unlearning experience, after my education as a landscape architect, involved thinking of other interventions that could transform space instead of thinking of morphological, aesthetic, functional or economical means.

'... going beyond first ignorance with its feeling of absence or of disorganized accumulations, in order to approach the site in its singularity. This is done, first by a 'floating attention', becoming impregnated with the site and its surroundings, in the course of long visits at different hours and in different weathers, to soak it up from the ground to the sky until boredom sets in, or almost'

(Lassus, 1998, p.57).

6.4 NOTES FROM PLACES VISITED

The following pages contain images that describe the wanderings through different locations. In this section I include some specific findings from those travels, translated from the many notes.

'In 2016, I did the Caminho Português from Porto to Santiago de Compostela. On this trip, I learned about the way the landscape in Portugal unfolded when one travelled by foot. When living Porto I found a site I visited regularly. In the Campanhã area, there is an abandoned rail track and several other post-industrial buildings.'

'The urban interstices of Berlin are often used as wild playgrounds for young and old: such places have proven to be places of experimentation, art and liberty. Many of these places have come into existence through an organic process. At the end of this chapter I discuss a project that has been transformed into a public park.'

'Many of those places are easily appropriated or privatised. If this happens for a short time, the places stay as they are. But, for example, many informal places around London South Wharf are currently owned by private investors, which changes the political freedom of the place: if a protest happens there, the owners can arrest the political protesters.'

'All around Madrid, there are random empty lots. Most of them are locked behind fences, but some have been turned into accessible wild gardens.'

'In Helsinki, the winter is dark, the summer light – it is extreme. The ocean freezes in winter and is a beach in the summer. Those who live there have a great respect for the powers of nature, which influences their perception of the human condition. During my stay, I interviewed Marco Casagrande in Helsinki. Raised in the far North of Finland (Lapland), he calls himself an animist. During my time in Finland I noticed that, because of the strong presence of nature, there is much more respect for and knowledge of the seasons. In winter, the sea becomes a field of ice. In summer, the same place becomes a beach. Marco called his own work a way of doing 'grandmother's cooking' – an intuitive improvisation at the site, where he sees nature as a movement to which we all belong. His office has come up with terms such as 'urban acupuncture' and 'third generation city.'

'Dikes, polders, land reclamation, allocated wilderness. The world seems so malleable in the Netherlands. I believe this is why natural

areas in bigger countries is so attractive to us: it gives us a sense of something bigger than us.'

'On the top of the highest mountains of one of the islands in the Azores archipelago (São Miguel) we find an abandoned hotel. This place has become an informal tourist attraction where visitors are confronted with past times.'

'In Barcelona, a dense city with an old town, we see many corners that are forgotten and decaying, but they seem to become part of the total scenery.'

'In Delft, residual spaces overgrow with grass and are used as playgrounds for practicing graffiti tags.'

'In fall 2018, I took a journey through place and context in Jutland, Denmark. The aim of the trip was to reflect on the site visit as an important factor in understanding the relationship between local site visit and understanding the landscape.'

'The issue is how places become abandoned and neglected, and how this issue can be perceived in its context. We do this by taking a full day's field trip consisting of some reading, printing of maps, a drive through the landscape and eight stops to walk to some spots in the 'Rotten Banana' of Denmark. At several spots, we explored the area and zoomed in on certain details or locations. Then, we extracted information from this experience to demonstrate why a site visit with a contextual approach has added value in relation to research.'

Porto, Campanhã

If anyone asked 'where is your Phd about?' I didn't have words. Instead, I showed those who were in town this particular location in the city I lived at the time: Porto, Campanhã. This was the first focus, intending to analyse and redesign

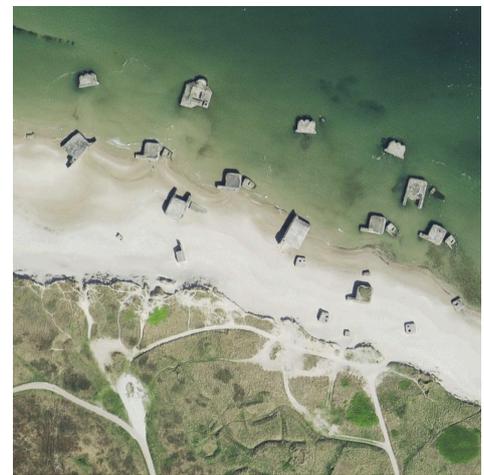
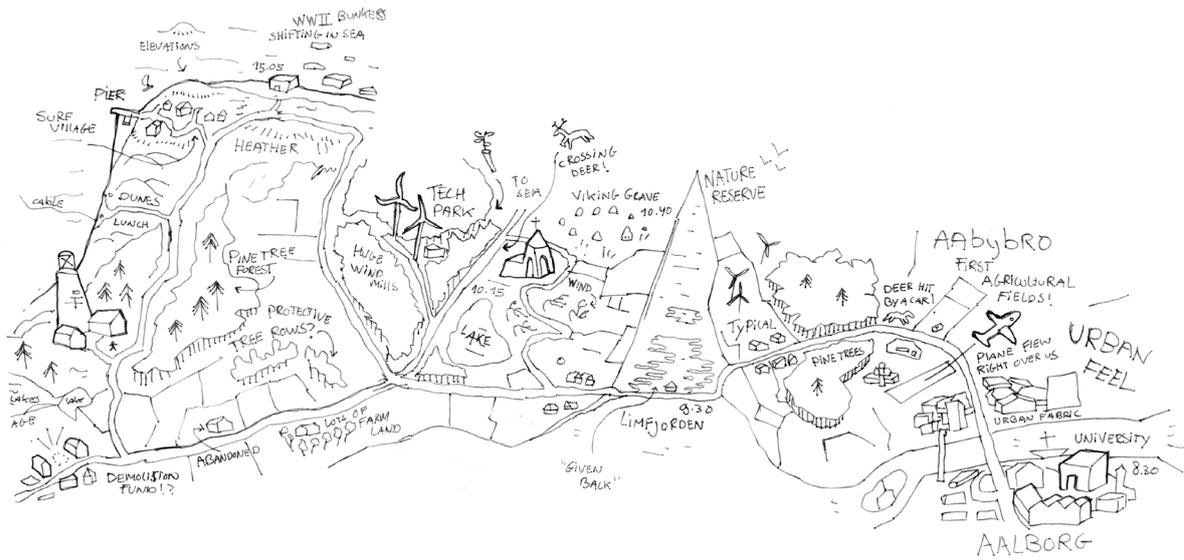


Fig. 35 Field impressions - as found. Photos of travelled transects that have challenged thinking about the meaning of heritage, material decay, human traces beyond history.

the space while utilising its 'terrain vague' by minimal interventions. Intervention reacting to the leftover space was the initial idea. But by making visits and reading literature, living in the city where it was located, it gained a total new meaning and value. The amount of ways to look at the space kept multiplying. This resulted in not wanting to redesign this landscape, but rather to learn from it - and its kin which equivalent might be seen in many places all around Europe. This shift was induced by my visits and encounters with people and traces of all sorts, at the place. Trying not to read about it in the archives, I kept visiting and meeting with different people. Instead of explaining every single visit, I mesh this into a single experience, which could also represent the 'collective case study' that this whole thesis entails. The places are fragmented but by seeing it as one mosaic, also joint in space and time. Since I lived in the area and it was easily accessible for me, it developed a special meaning for me.

The area in Porto contains several kilometres in the shape of a line. At the end of the 19th century, the two rail lines were built over the upper and middle terraces, enforcing a physical border between the river and the city on the upper hill. Currently, the city is undergoing a process of deindustrialization. The harbour moved to the coastline and the development of the train and car industry made the city turn its back to the river. The use of the middle train line on the site depended on the trade in the historical port, became harder to sustain economically, and eventually went obsolete. The economic regression and high unemployment due to the financial collapse in 2008 led to the migration of the younger generation. During the industrial revolution many workers came to the city of Porto. Their settlements, closed communities had the form of 'Ilhãs' meaning 'islands'. Around this area in Campanhã many factories were settled, mostly related to production and electricity conduction. When the harbour of Porto moved outside the river,

to the sea at Matosinhos, the railtrack became redundant. This infrastructure together with bridges, the factories, small remains of some Ilhas- some in hand of the government, others by private companies.

"During the visits in this area I encountered a tour guide, homeless people, local farmers, a fisherman, remains of fire pits, graffiti, cats, a dead dog, a single resident- overgrown areas that were sometimes cut by a yet unknown party, signs and even some 'art' pieces and signs. To reach the factory site, it was necessary to climb a fence. Noticing signs of other users, these fences were more often climbed by others. In the time I lived in Porto, I had invited many people, of which most were (landscape) architects but also in arts and engineering. One of the first time I walked with two landscape architects. Indeed our talks would be about transformation: we imagined how we would make a bicycle path here (since the train track has such a gradual slope), paint this building to create a structure, reroute sewage of rainwater falloff systems and propose a line of trees with a sports field. Those impositions were quite humble compared to the large redesign of the site, but remained impositions nevertheless. Visiting this area for three years meant many things changed- mostly the seasons would give a rhythm of different mosses, grasses and flowers. Farmers would use crops ('couve', a Portuguese cabbage), and their crops would grow over other pieces of land. The remaining abandoned houses would derelict more, and during the years the big factory building was occupied with a homeless person. After I think the fourth time at this site, I still did not speak to the homeless person since I was at the area, since he always seemed asleep.

When I wanted to climb the fence once, which is quite a vulnerable act (anyone can see you do it), I noticed he had blocked the usual 'entrance' with a plank. It was more a gesture than a real obstruction. Nonetheless it made me feel that

he noticed me, I was hesitant to enter the site. Behind me, a girl assured me that she had gone there before, and that she and her boyfriend found the homeless person posed no threat. She had been sleeping in the car next to the site during her travels, and had spoken with him. With this resistance to the place, I could experience the fact it wasn't safe for everyone. I am a tall white male and I often took a dog with me. This means I am already quite 'safe', depending on how you look at it. I could be physically harder to overthrow, but maybe my 'tourist' looks would also mean I could have something to steal. But I didn't feel so suspicious. At this large area, it seemed to me, no-one was looking for a conflict.

The thing that everyone attracted to come here seems to be a lack of order, a lack of conflict- or at least different kind of conflict. One conflict is the fact one of us was afraid to be scared away by the other. I felt the need to say, I mean no harm, I am just passing by. It was the lack of order that this space seemed to attract the homeless person of this area. Entering the other factory building, that was overgrown from the inside, I kept being fascinated about the building. A huge metal object layed in a hole in the floor. Did this happen just at a silent moment, out of nowhere, or was it done by someone, perhaps those who had used graffiti? Someone had placed a chair. Everywhere on the ground there were scattered roof tiles. Was it safe here, were those asbestos? Climbing to the highest floor of the building, I felt scared- can I return here, and is this floor stable? So besides the encounters with people, the place would bring me new experiences with the materiality of the site: things could break or were broken. The way in which they were broken would give me different insights about the energy or strength of those materials. It made me wonder not only how the places were once alive, also how the structures elsewhere in the city were made, and what could happen with them if they were left abandoned, too."

The visits of the places helped to create a structure of this mosaic of research, a reflective experience where I could lay out the literature and design ideas on.

6.5 THE CHANGE OF JOURNEY

I believe the rawness and potential in Portugal is what attracts me and many other visitors. I later discovered that this characteristic is not to be taken lightly, it is bigger than us, placing us in confrontation with the shadowy side of potential: uncertainty. My journey on the Caminho Português, too, sparked an interest in understanding places on foot and through personal experience, rather than working more with the measurable and more morphological approaches that I learned in my architecture Master's. I read Ton Lemaire's 'Philosophy of the Landscape.' He describes a change of journey, which is something I contemplated during this journey.

What is the idea of 'travel,' and what does it means for research? Every time I had visitors in Porto, I noticed how differently people travelled. You can travel to a destination to see specific hotspots. You can travel to a destination to experience new cultures. Then, you might search for authentic and more local experiences within the city.

After that, a new kind of attitude arises: one that is not so much engaged with finding something particular, but one that aims to be part of the place as much as possible – if that is even possible. The prediction of the post-modern is that we now look for experiences more than materiality. But with an awareness of the price of those experiences (environmental) and knowing that they are also guided by mundane things (riches, status), a new layer arises. A way of travelling where we seek to become the surroundings, to read the self again – and to feel that our presence has meaning.

When we travel, we leave our hometown, and we leave our closeness to our everyday lives for a moment. When we go for a walk, for example, we stay normally in our habitats: this is a place of peace and trust in our safe, familiar worlds. The journey does the opposite: instead of giving our attention and care to one single location, we indulge ourselves with other ways of living.

With this experience, we understand that there are other people with other cultures, who use other types of space for other purposes. Journeys require courage, not just because of the possibility of getting lost, but also because of the crisis that occurs: the crisis of the self. This alienation of ourselves wakes us up and forces us to see ourselves through the eyes of the other – we can look at ourselves as one of those inhabitants in strange, faraway places.

In this sense, the search for the other becomes a meeting with the self, the secret self. One can find it by losing the self. Where medieval man had to overcome the troubles of travel, the 'modern European' is someone who searches for those things, who develops their consciousness. This person does not search for themselves inside, but outside. This may also be vital for research. The test for the young researcher is preferably the documentation of their experiences and interpretations – just like this chapter, or even the whole thesis. To 'do' science, to search for 'truth,' should, in our modern times, be achieved and sought through a journey through 'the other.'

The experience of the other has gone from being avoided to expanding and creating new knowledge, to that of the tourist. How could our relationship to nature have altered so much? Ton Lemaire argues that this is caused by losing our traditions. The tourist's fascination with other cultures and habits relates to the fact we have lost our own. It is not just wealth that makes the tourist: this type of travel has existed since the Renaissance. We can ask: how do the

tourist's travels differs from other travel. And what is so special about some of our spaces and landscapes that they should be visited nowadays – and not others? In medieval times, Christian pilgrimages (and prior to that, many heathen ones) took place throughout Europe. Not only did medieval people experience at least one pilgrimage in their life: their whole life could be seen as a pilgrimage. Their presence on earth is just a stage, a search through a labyrinth.

When I did the Santiago de Compostela pilgrimage in Portugal, it was indeed a different kind of travel from anything I had experienced before: a clear end goal defines the journey, while walking can only be done one step at a time. Peace and acceptance of the vastness of landscape and time takes hold of you. During the journey, however, I was constantly reminded of urbanisation processes, like highways fragmenting the landscape, shrinking villages, other tourists and the commercialisation of pilgrimages.

For the typical modern tourist, space has become homogeneous. Spaces are something that can be chosen from a magazine. Everything is interesting at the start, everything should be worth visiting, something to see. Space has no hierarchy: the space of things worth visiting is consistent. Perhaps it is just the order of what is worth seeing that is defined by the most memorable, status-enhancing experience. Space and traveller have no center, unlike the pilgrim, who is searching for a center or final destination. The traveller becomes a flâneur, a simple wanderer going everywhere, ready to be surprised, to consume experiences around them. This flâneur gives the illusion of free will: the surrounding space and life forms and guides them more than they would believe. Travel is also fashion: it gives status. It therefore gives an authenticity of place, which seems to fade by being an option, becomes more important. But to find the authentic genius of a place, time and context are essential.

As Lemaire notes, the 'end' of the picturesque landscape is not coincidentally connected with the tourist: the tourist is the type of person who doesn't need to have landscapes in their house: they can always travel to them. The tourist is, in this sense, the embodiment of everything that western societies have desired and mobilized over the last centuries, but they live in the landscape. The tourist is the true visitor and admirer of the world in its infinity and eventfulness, as well as fulfilling the autonomy of the world in terms of nature and culture. When nature and culture have become autonomous and separate, we become dependent on our own validation of the place, assessing our own experiences.

This self-searching becomes an internal struggle to look at our own situation for places worth visiting, for sceneries we would like to see ourselves in, to be surprised and to admire ourselves. We become our own picturesque – the narrative of who we are as travellers, selfies as postcards to construct this reality. We are merely concerned with our own authentic placement within the scenery. The landscape here is an extension of ourselves.

With tourism we need to constantly create a scene for ourselves, an identity. With that identity come different objects. Everywhere this visitor goes, they will be conscious of being there – a constant mirror of the self. Being watched by others. Being watched by locals and those who are on holiday: seeing and being seen, the self in the other and the other in the self! Where nature was watching the pilgrim, tourists are absorbed with themselves.

With the Anthropocene the role of the tourist is changing. More and more, tourism becomes aware of its effects on landscape. The tourist is not only a consumer of a landscape, they are also the shaper of it. Can there be a new name for this type of traveller? I could call this traveller a post-flâneur, a conscious wanderer, willing to engage in the extraordinary aspects of

the mundane, and even seeking, in vain, to find otherworldliness in spectacle (Debord, 1973). However, this new wanderer is not naive. This wanderer acknowledges a need for urge-agency, entangle-mind and response-ability.

This could be an awoken '*homo ludens*'⁶⁷, not numbed by the '*soma*'⁶⁸ of everyday life, but ready to consciously 'become' contaminated by their surroundings, by their visits – 'becoming' through adding meaning. Adding meaning by being sensitive, 'tentaculary' to the invisible flows of the place. Conscious of their participation in place, conscious of their self-claimed difference to calm the existence of the ego.

6.6 ENTERING PLACES

To demonstrate how this particular way of travelling might be done, I aim to describe how to 'become landscape' through sharing my own journey of change, but also how I have perceived elements of the landscape. This journey is linked with literature and conversations with people along the road: experiences that also colored my lens of reflection on this journey over and over again and will continue to do so.

Not knowing how to approach spaces or how to learn more from just theory, not knowing exactly how to relate to those spaces that are the effects of the Anthropocene, my

67 *Homo Ludens* is a book originally published in Dutch in 1938 by Dutch historian and cultural theorist Johan Huizinga. It discusses the importance of the play element of culture and society. Huizinga suggests that play is primary to and a necessary (though not sufficient) condition of the generation of culture. The Latin word *ludens* is the present active participle of the verb *ludere*, which itself is cognate with the noun *ludus*. *Ludus* has no direct equivalent in English, as it simultaneously refers to sport, play, school, and practice (Wikipedia, 2020).

68 *Soma*. A drug in Aldous Huxley's 1932 novel *Brave New World*.

research was complemented by many site visits throughout Europe. It is, in fact, through reflection on those places and projects that the theory could be organized. Next to writing, drawing, designing, talking and discussing, going to places is a way to organize thoughts.

It is for this reason that I approach and practise theory relating to the act of walking, experiencing places, mapping phenomenological understanding. It is through action that a sensitivity to the ongoing processes of the environment comes forward. This sensitivity is always in connection with a scale greater than the individual. In order to enter places that are not monitored or continually shaped and reshaped by our own language names, or architectural institution, I used an approach for finding places other than those we see on an everyday basis: a burglar approach. This involves going specially into places that seem to be monitored or hidden in the city. Going against the expected flow, I would end up in places that are less contaminated by the ideas of the everyday.

To analyse a site and its new purpose, I believe that designers act quickly in creating a new image of imposition. We can think of '*Fuck Context*'⁶⁹ scenarios. Being unconcerned about the context is understandable, as those contexts will always exist, and don't need to be considered rules for designing, particularly when the intervention is there to give a new shape to the context. Projects often help to bring new life and meaning to places.

Rem Koolhaas – Casa da Música in Porto – was made to fulfil the requirements of politics and the city, while the results were not dependent on answering the implications of the direct

environment. In fact, this direct environment was already seen as undesired. A typical modernistic project that would '*Fuck Context*' might help the place gain economic value. The emptiness of such a place is, however, an island of out-of-context values. To stitch and heal the relationships of such places takes time but can, in the long term, definitely contribute to wellbeing.

Regardless of the results, the focus was on impacting the environment in a certain way, rather than being open to unexpected encounters. As a strategic approach in the Anthropocene, shaped by complexity, urgency and questions of responsibility, where we have to deal with the uncertainty of communities, we could argue that we need the reverse: can the environment contribute to the development of the site? This helps the designer see space as worthy, trying to understand existing system that can be built upon – as working with inherent energies and qualities might be closer to environmental justice and more efficient.

However, this investigation demonstrates how the in-depth understanding of places through inventive analysis leads to conclusions about important aspects of sites, and how those understandings, mappings of the Anthropocene, can be interpreted for design. By intervening in abandoned places, inventive analysis works to open up to the overlooked qualities of the place, so designers can engage with the emerging qualities or the altered experience of the site. Given the uncertainty of the future, a more receptive approach to the environment is needed. If designers notice the existing qualities of the context, this will nuance the design transformation. Inventive analysis creates the possibility to open oneself up to encounters within site visitation and the design process. The landscape designer can consider inventive analysis when engaging with decay, as it contains specific site, time and contextual configurations.

69 *Fuck context*. A famous saying by Rem Koolhaas. He means with this, that context does not always have to be the guide for the design: sometimes projects can also bring new meaning and purpose to places.

In the article 'A Dutch Perception,' de Wit and Bobbink rationalize the landscape in different layers, mostly determined by the morphology and processes that formed them. First, they build on three classical perceptions of landscape, and then speak about a fourth form. They start off with the natural landscape as 'a form that reflects its geological evolution but has no formal determinants.'

According to their research, the cultural landscape arises out of a process of cultivation, from intentional forest burning to organized agriculture. The urban landscape is landscape that has been shaped by the engineering process on natural and cultural landscapes. De Wit and Bobbink propose a layer that has been consciously combined with these layers, forming a cohesion of underlying and connected layers, calling it the architectural layer. They state that 'landscape architectural quality arises where the architectural treatment of the basic forms in the successive layers (the *genius loci*) renders the landscape '*lucid*' or '*legible*' as an identity in its own right'(Bobbink and De Wit, 2006, p.21).

Entering places should not only be connected to its historical layers, as well its context (in this case understood as natural, cultural and urban), but it should also shape the landscape and the way these understandings shape the space. The architectural space could, if approached morphologically, be seen as four aspects: ground plan, the spatial form, the visual structure and the programmatic form.

Seeing these aspects separately might help us explore the interaction between the architectural form and the underlying landscape structure. Morphological spaces were not applicable for my 'burglar approach' of site visitation, but the most important understanding here is the relationship between different layers in landscape and scales of place.

The architectural layer of the landscape can make a specific character, a genius of the larger scale, explicit. This approach speaks of continuity: the character of the landscape layer, as it seems to suggest, can become sensitive to the successive layers. To be able to do this, the processes and forms of the locale and the larger scale must have been interpreted, before new work is opposed. In their article, the authors seem to imagine the architectural design of landscape to be successful when it is considerate of those factors. But, as seen in the expanded field of landscape architecture, as described by Elisabeth Meyer, the intervention can be approached as a landscape alteration of the architectural layer.

The emerging patterns and clues found in the place that are related to larger scales may say something about how these larger scales have been interpreted and referred to within architecture. Interestingly, this reference does not have to be one-sided. It may be the case that the larger scale becomes explicit through doing what works on that larger scale, a sample of the scale continuum. Doing this might give us clues as to how minimal interventions can provide options for the larger scales to emerge as well.

Is this not a paradox? Would these parts not go away when we projected images of the future on them? The quality of the ruin is precisely its vagueness – its '*terrain vague*.' Could we preserve this vagueness, or even enhance it? Could we communicate to others that these places do actually already have value of their own? Isn't there a way we all could live and feel inspired by the potential of their imperfection, teaching us lessons about the self, about love, acceptance and contributing to resilience? And what else could these places teach us? I also felt that I needed to know more about this from a theoretical background, as well as needing to feed my experiences in relation to the ambiguity of spaces.

6.7 LANDSCAPE ARCHITECTURE PRINCIPLES

During the PhD I had the opportunity to teach design courses in Architecture, Urbanism and Landscape Architecture. With several groups of students we discussed how to approach wicked problems. The students had primarily worked with design projects that were linear: there is a problem, the designer is there to find the solution, and in the end the resulting product will give the best solution to the problem. Here, the role of the designer is very technocratic. I wanted to discuss how to alter their role as a designer and make more room for the reality that lies at its core, characterized by complexity. How could we practice this thought?

We are standing in the now, the direct environment and what we can read from the place. This is linked to our senses and everyday life. Beyond the now are the ideas and associations that bubble up in relation to this environment. Hermeneutics lie at its core. This perception is influenced by what we know. This place reminds us of the past, or things we knew before. This has to do with our education, culture and direct experiences of the place. It can also be connected to a sense of the distant past and understanding time scales spanning millions of years.

Simultaneously, this can be linked to a spatial scale. The processes can be put on a map, where we can predict the impact of their meanings in our direct environment, if they work with space around us. It also links us to meanings like starting a car, what it might mean on a larger scale. The letters S, M, L, stand for Small, Medium and Large scales. Then, after this reflection and reading of the past and the now, the place also can refer us to future ideas. A geologist will look at an idea over a long time – past – and on a large scale. The geologist will see the public library, which will be used for

several decades ephemerally, while an architect would see this as having an impact on society.

To dive deeper into this matrix, I would like to compare it with the literature and method of understanding places that are well-known in landscape architecture. I think this is an approach that works by explaining how landscape-thinking works. These methods have made me aware of time-space connections. It is worth mentioning these principles as they convey the way places have been read and approached. Next to this ontological 'change of journey' these elements are epistemologies that build on phenomenology.

In Marot, S., (1999) 'The Reclaiming of Sites', a constellation of the four most significant ways of looking at the landscape are explained, although they are inseparably interrelated: the palimpsest, landscape as scale-continuum, as a process and as a three-dimensional sequence. These four pillars stand for the structure that will provide us a broader understanding of the landscape, when placed in line with concepts by different authors (Marot, 1999).

movement and space

Looking at the literature, this relates to how the individual perceives the environment by moving through it as a three-dimensional construct (Fig. 36). This is the phenomenological approach to space, and this can be done by walking, observing, drawing, being (becoming) part of the place. It is space as a sequence, so it does still relate to distance, time and has a component of past and future, but it is mostly related to the direct experience. When we walk through the city of Rotterdam, we can see the diversity of tall buildings, leading us onto a path of experiences, colors, impressions and emotions. Without really connecting the dots to other information, this aspect really speaks about the direct sensation of the place.

traces of the past

Anamnesis is the perception of the traces of the past, and how they draw us to the known (Fig. 37). It is the readability of past lives and helps us feel connected to a place, as it helps us simulate the narratives of others and therefore raises a mutuality. In the figure, we can see anamnesis as a way to dive into the past. The anamnestic approach means going into a rabbit hole that will reveal more and more of the past, often stimulated by a knowledge of history and a deep understanding of existing processes. This grounding in the past can also be called the *genius loci*. The spirit of the place, as coined by Norberg-Schulz, is the identity of the place as a standalone character. An entity that is more than the sum of its parts: a place that is more than the organization of its space.

Looking at underlying layers that are produced in the landscape through its existence over time, landscape architects use the term 'palimpsest'. This refers to the re-use of manuscripts that were used before the invention of printing. The medieval writing block was invented in 190 B.C., by King Eumenes of Pergamon. Parchment is strong enough to be preserved for a long time, but it was too expensive to be mass-produced.

That is why people repeatedly wrote on and erased the parchments: to recycle them. The word 'palimpsest' means a parchment that has been recycled numerous times. The palimpsest indicates a condition where layers of complex meaning are involved, where old layers can be rediscovered and give new meaning and interpretations. Based on the cognitive process of transferring the meaning of the palimpsest into the memory of a place, this leads to the conclusion that place is not a fixed physical entity, but an organic one, one that evolves and transforms continuously (Koo, 2009).

In relation to, for example, city of Rotterdam, this approach works by helping us understand the appearance of buildings from different time

periods, by understanding more about its past. Rotterdam was bombed on May 14, 1940. This knowledge leads us to the past. It can help us understand the emotions and stories that happened in these places in past times: where this tall building now stands, there used to be a small, lively café. Sometimes this can be read in the space. Seeing a new building next to an old church that relates to that past helps us build the narrative of the way people cared for certain buildings more than others.

scales and stories

Relational structuring helps in understanding how this works in relation to a larger scale and a context (Fig. 38). It is the place itself, and the understanding of the past, that can help us relate the space to a larger context. As we can see, this relational structuring is often not directly related to the three-dimensional construct: through education, with a sharp, analytical mind, this can be achieved more easily. The last and most vague aspect of this drawing is the understanding of the land as preparation. This approaches space as a large amount. This relational structuring can be seen as an experiment about what it meant for the city as a whole to be bombed.

invisible processes

The most abstract and difficult aspect to grasp is preparation, our environment as an ongoing process (Fig. 39). Next to linking scales and understanding the impact of the past on the now, preparation is a kind of link between these perspectives. The idea that the new buildings of the past are now in ruins makes us realize that the present, too, will one day be the distant past. The understanding that the present is the result of the past, and that what we do will always play a role in the future, makes us realize that we are actors in a bigger picture. This also helps us read some of these movements. And it can help us predict or sense an emergence in the future. Can we, by being aware of our environments, facilitate an emergence that is

sensitive to its surroundings?
Small interventions and big processes are always connected: the context defines the object, and vice-versa. Using the palimpsestic approach, the landscape is a build-up of past happenings, and we are likely to think that these kinds of operations also make their mark on the future as well: the landscape will always change and is an always undergoing processes.

Landscape is seen as never finished: projects are approached as open-ended strategies and thoughts about the future: landscape is always dynamic and interactive (Fig. 40). The scientific notion of matter was, according to Whitehead, misleading in describing the ultimate nature of things:

'There persists ... [a] fixed scientific cosmology which presupposes the ultimate fact of an irreducible brute matter, or material, spread through space in a flux of configurations. In itself such a material is senseless, valueless, purposeless. It just does what it does do, following a fixed routine imposed by external relations which do not spring from the nature of its being. It is this assumption that I call 'scientific materialism.' Also, it is an assumption which I shall challenge as being entirely unsuited to the scientific situation at which we have now arrived.'

(Whitehead, 1929, p.22)

As Whitehead argued, reality consists of processes rather than material objects. Laying the groundwork for process philosophy, Whitehead's work rejects the idea that reality is constructed of bits of matter that are seen separately from each other. And it is problematic to think in this way. 'There is urgency in coming to see the world as a web of interrelated processes of which we are integral parts, so that all of our choices and actions have consequences for the world around us' (Whitehead, 1929). Concepts such as quality, matter and form fail to account for change,

much like the idea of difference.

visual and tactical

In order to illuminate certain parts of history, one must communicate this by making the landscape tactile and designing with the knowledge of this landscape as a three-dimensional construct in which we move.

B. Lassus explains this role as 'a reading that crystallizes the fractions of appearances' (Lassus, 1998, p.68) Just before this, he notes the difference between the visual and tactile scale: by appearances, he seems to mean the complete experience of an entity in space.

Sébastien Marot call is the unfolding of the pathway that is followed on the human scale (Marot, 1999). The experience of a landscape is sensory, it shows itself by movement, and is determined by objects and light intensity.

The landscape unfolds in a sequence when our bodies pass the space. It is a rich and complex vision, which involves a project containing all the layers that compose this landscape.

6.8 WALKING AROUND THE TRUTH

Think about Plato's 'allegory of the cave': trying to understand the world, defining it in words and concepts, we are no more than prisoners in a cave, chained up, facing a wall all our lives. Behind us, a fire projects shadows onto this wall, and the prisoners' reality is defined by the names they give to those shadows. The prisoners do not yearn to escape the cave, as they do not know that this is an illusion. One day, one prisoner breaks out of his chains and discover fire, which changes his reality forever. Then, he leaves the cave and sees life and the world, which are now his new reality. Then he discovers the sun, realizing that this world is also reflected, that there is even more he might never understand. Going back to the cave, excited about helping the others, his eyes have become used to sunlight, making him blind in the dark. The other prisoners, seeing his blindness, believe that he was harmed and agree to kill anyone who attempts to drag them out of

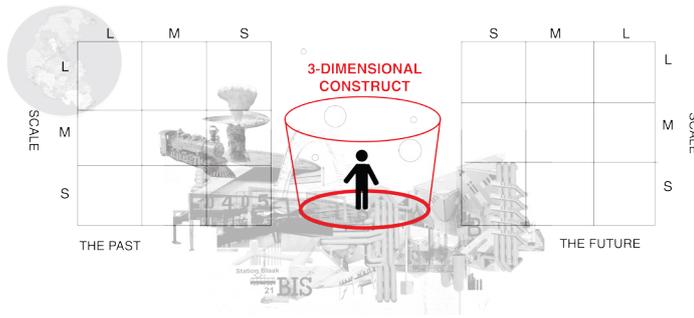


Fig. 36
Three-dimensional construct. What is around here, how does the space allow me to move, think and feel? Who and what bring soul to the place, 'animate' it?

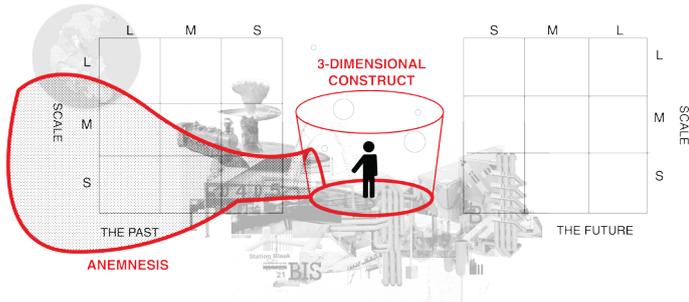


Fig. 37
Anemnesis. How does this space originate and what signals in the space hint to that past / process?

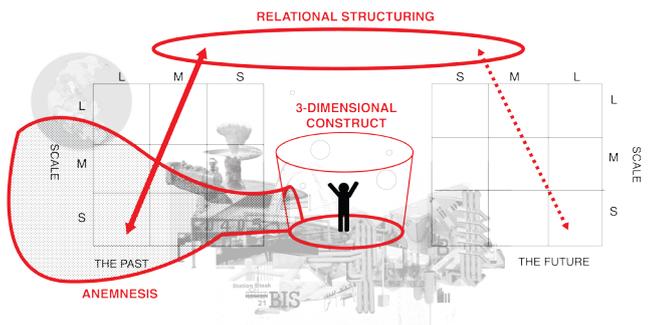


Fig. 38
Relational structuring. How do the clues relate to narratives and concepts on a broader scale- do they fit or contribute something new?

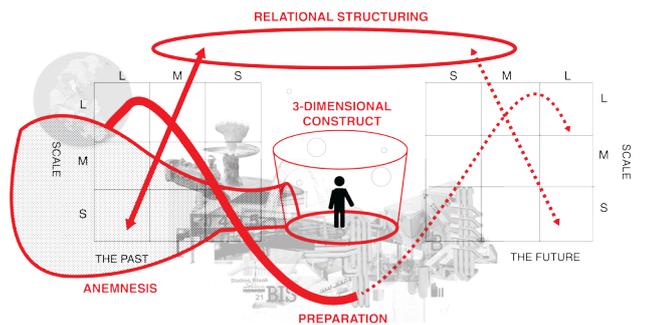


Fig. 39
Preparation. How does the understanding of this construct create a model for understanding occurring / concurring processes?

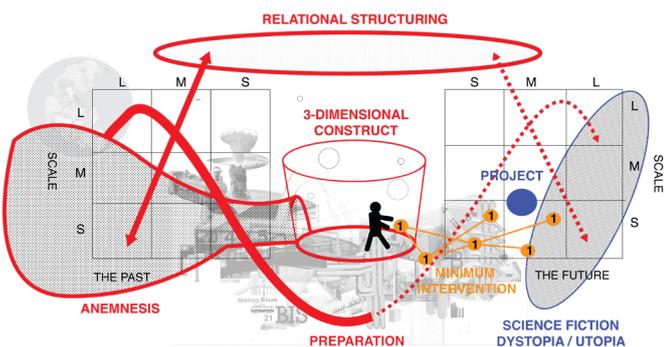


Fig. 40
Minimal intervention / Fiction. How/ what kind of action, with what kind of assemblage of possible futures can be done?

the cave (Heidegger, 2013).

Science is about getting closer to a truth. And with so many measurements and the naming of shadows, it is indeed logical that the ideas that are mostly agreed upon lie closer to the truth. It is clear that truth-seeking benefits from a range of very different approaches, while it is also recognized that no one approach is or should be superior to the others. However, some might be more valid within the existing built framework of truth. This is what is meant by seeing science as a construct.

The message of constructivism is: nothing can be approached in its totality. No one perspective is superior in this approach. These observations result in a world where anthropocentrism is effectively blindness. The process of thinking has been connected to human life since the beginning of 'our' time. With object-oriented ontology, Morton (2007; 2010; 2013; 2016) makes it clear that, in this world where we as humans have many ways of perceiving meaning, and have created tools to access to certain meanings, perceptions and understandings, these ways of looking are just a few out of the spectrum of ways objects are brought into existence.

The way a rabbit sees an abandoned house has the same value as the way a burglar would see it, if we are talking about the way those perspectives bring the abandoned house into reality.⁷⁰ Object-oriented ontology is especially useful in a world where we are more aware of ecology. In ecology, it is clear that the human perspective does not necessarily get to the bottom of things. This idea is a branch of the 'critical realism' I mentioned in the first chapter (Morton, 2010).

70 'A rock pile ceases to be a rock pile the moment a single man contemplates it, bearing within him the image of a cathedral' Antoine de Saint-Exupery, *The Little Prince*.

It can be hard to implement this idea, or to communicate it, as there is the danger of obscuring. I experienced this during a site visit with a friend who is a researcher. I had invited her to visit the Campanhã site in Porto with me, for a site dialogue. Her research was similar to mine in terms of finding new ways to value neglected spaces. For her analysis, my friend approached her work through pre-determined particular lenses that, in her opinion, are important for shedding light on certain overlooked aspects of the site.

In her work, these lenses were pre-determined through literary research. This raised discussion. In order to be in touch with the unexpected qualities of space, it might be important not to only get this understanding from literature and then apply it to the space, but also vice versa. How can the site itself bring a new encounter of understanding to the visitor beyond pre-determined lenses?

In the Anthropocene layer, it becomes more and more vital to look at this life from a different perspective. The difficulty with this is that we might ask ourselves whether it is possible to place ourselves in other beings and think for them. As discussed before, this becomes almost a psychological issue. In the book 'How Forests Think' the author explores ways of seeing the forest as an entity, a being in its own right. With this question, he challenges the foundations of anthropology. Eduardo Kohn looks at the way humans relate to other things as a way to reach the fringes of our world, in order to come closer to nature. In this work he dives into semiotics and speaks of selves instead of human and non-human beings. He also differentiates between animate and inanimate objects. In his ethnography, he carefully describes the context of Amazonians and their surrounding rainforest through symbolism and signs. Eduardo shows that the common language between all lifeforms can be extracted from symbolism.

Whether or how a tree thinks is not the concern of this thesis, but rather: whether and how a tree can be left to its own thoughts and allowed to think for itself. I am more interested how space can be left to think and speak for itself, rather than how or what it thinks or speaks. By allowing space to speak for itself, it might then become easier to understand it (Köhn, 2013).

Representative of the 'state of the earth,' we can look at places that are altered by many different factors, where a complexity of flows influences the shaping of the space, not managed by human control but formed of a web of complexity – and still changing. The abandoned place can be seen as a representation of the Anthropocene landscape.

In 1979, the movie *Stalker*, by Russian filmmaker Andrej Tarkovski, was premiered. In this movie, a writer and a professor are brought into a forbidden zone by a third person, the stalker. In this place nobody knows the direction, nobody can actually know it. During their visit they encounter the most unpredictable situations. It is not a peaceful place, a place in which to feel home, but one where they are surrounded by otherness. It gives the feeling that the place is acting autonomously, with a mind of its own (Tarkovski & Stougatski, 1979)

Still, there are people who are willing to explore this landscape – they can be called stalkers. It seems that the absence of power and control (which is what has created this landscape in the first place) also attracts a range of new life. This fascination, the attraction to this otherness and the courage of being a stalker, is needed to explore the unknown and challenge the conventional engagement with this kind of place. This place can be seen as a symbol of our whole environment in the Anthropocene era. We do not know our way into this world, even though one can reach all the maps and data through GPS and the internet. The sheer amount of information loses us in the

complexity of the world. It is not just that a lot has changed, and quickly: it is also the awareness of the amount of information that is impossible to process.

But linking or creating a relationship with something always has consequences. And different knowledge can change the experience of space. This can happen with every kind of information: words, sounds, colors, touch. Even the renaming of a place changes the notion of space. Lassus gives some examples of the change of the notion of a place. A nature reserve becomes noisier when it is given the name nature reserve, a landscape becomes more unique when plans for a highway take shape: defining a landscape as natural is already a human intervention (Lassus, 1998).

'The landscape entity' is the concept of how a place can be perceived as different through the notion of it as a complete being on its own. It can be compared to the term *genius loci*, which means 'ghost of the place' and also creates a whole new world and identity around the spoken subject. So: the recognition of the landscape as an entity is not only a visual problem, but also a symbolic one. The meaning of a place is more than visual and can be extracted in ideas that inform us about the culture and beliefs of society. Referring to hyper-realism, this is the 'fiction' or symbol that is seamlessly mixed with the visual world (Baudrillard, 1988).

6.9 STALKINGS, MEETINGS

Having seen the area a couple of times, when looking out of the train going from Porto to Aveiro, I felt the place calling to me. What was happening there? I knew I could go there and enjoy more freedom – I felt I had the courage to trespass, to demonstrate to others that a path could be made. To pioneer a new way, a rebellion in the space. A response to capitalism.

At this time, a colleague from my Dutch Master's course in landscape architecture. Robin, had also moved to Porto. Together we started to explore the city and encountered many abandoned locations, where the disused train track between the old city center and Campanhã always fascinated us. From our landscape architecture background, we discussed the many possible futures that could unfold in this location.

We were quite eager to impose new ideas on the existing place. It was, ultimately, what we had been trained to do. But learning from the world around us and our research into abandonment, it was not always possible to impose such projects. These initiatives depend on money streams, interests, politics and culture. Things that take time. However, we were right there.

Had we become stalkers? Over the years that followed, I invited many friends and academics, mostly in the fields of design, architecture, heritage and art, to join me in experiencing and discussing the role of those spaces. Many of them had made pictures that gave me insight into their experiences.

I took advantage of the space and time the doctorate afforded me to explore. Initially, I mostly stayed in Portugal, travelling through towns and villages around Porto and Aveiro, but eventually I went further north (Gerês, Santiago de Compostela) and south (Lisbon) and east (the interior, Guarda) and west (Azores Islands). Places are submitted to their geographical and societal positioning.

During my first years in Portugal, I visited abandoned sites and transformed places in Portugal and later also in Spain, Ireland, England, Italy, the Netherlands, Belgium, Germany, Denmark, Finland and Estonia. Many of these places I visited on my own. When with others, these locations would lead to discussions

about site visits and projects. Thanks to friends, I could stay for weeks in different cities. In 2018, I did not have a home for ten months. Fortunately, I also enjoyed longer stays. That year I also had a visiting scholarship at Aalborg University in Denmark and at Delft University of Technology in my home country, the Netherlands.

As well as seeing the same patterns in different environments, another valuable experience during these travels were the people I met. Most of them were scholars, PhDs, post-docs, architects, teachers, artists, designers and researchers. Most worked in the fields of architecture, urbanism and design, engineering, as well as the humanities, biology, ecology, geography and geology. I have met local people, mayors, elderly people in bars, at dinners and with the family of friends, who told me stories rooted in the past.

Being with them allowed me to see the space through different eyes, to discuss and interview these people. Not to take over their stories, but to understand their relationships and the richness of this multiplicity. I conducted interviews, but always made notes during my travels. This resulted in a bookshelf of sketchbooks and bags of papers. In this thesis, I highlight fragmented parts of this entangled journey, that brought me the most significant insights. Nevertheless, those insights were always linked with other, invisible parts of my journey. It is as though it was only after the journey that I was able to look back on my travels through a lens that had been shaped by those very experiences.

6.10 UNLEARNING

A major issue is shedding off the biases we had before. What exactly do you unlearn if you unlearn architecture? Architecture and design normally try to give order, mostly in space. Their

imposed projects try to counter the process of order turning into chaos. Entropy can be called the 'dis-ordering of space' and therefore provides a contrast to highly organized places in the city. Edensor seeks to position the materiality of ruins as something special, different from the order of the city. He points out that this desire to create a clear purpose for ambiguous spaces has only increased in recent years. The ruin therefore becomes a means to critique the over-regulated way contemporary urban space is formed (Edensor, 2005, p.94).

The 'unlearning' experience of our world can be encountered in because of their material 'de-contextualization.' This can be understood in the way Gordon Matta-Clark's work, hollowing out buildings, provided a different perspective on the spatiality of the architecture. Matta-Clark coined the term 'anarchitecture' as a way to combine anarchism and architecture. This was the name of his discussion group. What is interesting about this intervention is that it can be seen as the unlearning of architecture, or something that actually exposes it (Matta-Clark, & Bex, 1977).

Unlearning is confronting, it can even be scary. It challenges existing comforts and touches on the fear of losing control. The psychological meaning of fear is not connected to concrete dangers in our lives. Fear takes many shapes: concern, discomfort, anxiety, nervousness, phobias. Fear is always related to what is about to happen – not what is actually happening now. We are only in the now. This big difference between the now and the concerns of the virtual, that which is not really here, creates fear as well. The problem with modernity is, I think, that we are identified by the mind and forget that we exist as a being in a body and an ecosystem, a context. If we create this difference, we constantly identify ourselves with the projections of our mind, which we cannot control or shape. The ego is searching for two things: to accumulate the past and to

secure the future, it is never concerned with being in the now. This association with the mind instead of the physical reality results in an obsession with order. The urge to be right, to win an argument and to show the other they are wrong, is directly connected to our fear of dying – our fear of imperfection and decay. If one identifies with a certain way of thinking, then an argument against this way of thinking is construed as a direct attack on the self, and a death threat. This, in many cases, has created wars and marital problems. If we could let go of our identification with our thinking, we would not need to be defensive or aggressive. The development of the self goes beyond – it is something that will never be understood anyway.

Time is subjective, its consistency is an illusion – but it occupies our mind and being. The past gives the ego identity while the future gives us the promise of freedom or satisfaction. In this time, we are missing the now. Life is now. The now is the only place we can act. The future is important for survival, and we can do things in the now to allow the future to unfold. Architecture could be seen as the materialization of this fear. We have to be aware that the now is more than a vehicle for getting to the future. If we see it this way, we de-humanize ourselves. We are even deciding not to live. With this impatience, it almost seems as though we are reading the book of our life, so focused on how it ends that we skip paragraphs and only read some of the notes. At the end of the book, did we really read it? Or just a projection of ourselves? The same can be said for the past. We can be so connected to the achievements or failures of the past that we do not allow ourselves to be in the now. The same goes for space and the way we relate to it.

The fears we encounter, which take us away from the present moment, like horror movies and hero stories, bring up emotions inside us. These can be guilt, pride, hate, pity, regret,

sadness. These are emotions we definitely try to sugar-coat if we can. In the process of transformation or intervention, this is definitely a difficult aspect. It is also a result of the cultures we live in: these emotions might be taboo or not tolerated.

6.11 A VOICE FOR MONSTERS

However, to face the truth and the now, the decay and death, the chaos and imperfection, the urgency and complexity, the uncertainty of responsibility within the Anthropocene, we need to look at the now.

The philosopher Immanuel Kant (1790) defined the notion of the sublime. According to him, sublime is the experience of something being bigger than us, beyond our control. To experience the sublime, we need to experience a sense of fear (or the uncanny). Experiencing the sublime gives us a feeling of being insignificant compared to the vastness of the world, but at the same time somewhat significant when we realize we are part of it.

'Enter Anthropocene monsters: the ominous, seemingly out-of-control creatures with the promise of apocalypse trailing behind them in the smog. As opposed to Frankenstein's creature, they do not have voices of their own, and yet their questions are screaming to be heard. They not only ask us why we created them, but also how we can survive them'
(Ulstein, 2017, p. 75).

To see whether these abandoned places can be given a voice of their own, the aim is to look critically at the transformation of a *'Frankensite'*⁷¹. A creation that has been

neglected for half a century, and now is steering towards a new future: Naturpark Südgelände in Berlin. This site was chosen because it seems that the way to deal with the Anthropocene is to create a monster-makeover: a way to render the abandoned, decaying remains of the visions of the past more acceptable. To do this, I aim to engage with this monster through an inventive site visit, combined with an awareness of qualities inherent to abandoned sites. For this, I draw on concepts of qualities from other authors, as well as my own experiences.

Based on the qualities of abandoned places from literature and site visit experience, otherness, play and time are concepts that can help raise an awareness of the site-specific qualities of the forsaken. Architect collective Stalker argues that, much like the Situationists, continuity and penetration into abandoned areas enriches the whole context, creating a confrontation with the 'other' (Lang, 2006, p. 193).

Because of its industrial origins, a long period of abandonment and its recent and apparently sensitive 'monster-make-over,' Naturpark Südgelände in Berlin was chosen as a study site (Fig. 41). This former Nazi rail-yard was abandoned after WWII. Over four decades, natural succession took place, during which time it was occasionally accessed by local residents and wanderers. Following resident initiatives, the land became a protected nature reserve area in 1970. In 2009, a new project was launched, opening it up to the general public (Kowarik, & Langer, 2005).

The old material elements, the informal use and natural succession during its period of neglect contrasted with the new interventions,

71 *Frankensite*. A boundless, disorganised area, existing of displaced assemblages of artefacts that mirror

short-term anthropocentric desires, but is not been care for responsibly regarding longer time frames and impacts on larger scales.



Fig. 41 Site visit, Naturpark Südgelände.

If designers notice existing qualities of the context, it will nuance the design transformation. The inventive analysis creates the possibility to open up for encounters within site visitation and design process. The landscape designer can consider the inventive analysis when engaging with decay, since it holds specific site-, time- and contextual configurations (Oskam & Mota, 2018).

1. Experiential qualities of material decay

- Grounded exploration of issues in Portugal / Europe on territorial scale
- Inventive analysis of multiple abandoned locations in Portugal
- Literature review about phenomenology of decay
- Framework of qualities of abandoned locations in Portugal

2. Landscape experience transformations by design

- Positioning of design dealing with experience of decay in landscape architecture
- Inventive analysis on site of a decay- mediating park in Berlin
- Towards clues for designers working with inventive transformations and working with dynamic qualities of material decay

The existing qualities found in material decay are its familiar unfamiliarity, the unbreakable and time textures. Reviewing the park, some of the project's designed aspects did contradict the qualities found in abandoned places, since a significant degree of disorder and freedom was lost. Nonetheless, the project succeeded to acknowledge and work with the spontaneous vegetation, displacement and entropy existent on the site.

encompass a 'difference' and 'narratives of the past' design approach (Braae, 2015). This anticipated contrast between chaos and design seemed to make it easier to imagine the place before intervention. However, after seven hours at the site, these assumptions did not seem to be entirely true.

With a 'floating attention' (Lassus, 1998, p.57), it becomes clear that otherness is apparent in this location through the use of displacement and disorganization. Some of the elements are sterilized and placed intentionally, taking away a level of disorder on a scale only natural chaos could bring into motion. The decaying material is purposely used for this park's identity. In addition, the art projects, made of COR-TEN steel, strengthen this sensation (Figure 41) – the place becomes almost mutilated and, in that sense, arguably stranger. The place is full of wild plants, but these are kept at different stages to intensify local biodiversity (Kowarik, 2005).

6.12 PLAY AND GROWTH

The most remarkable encounter with other humans or animals is the surprising number of tourists that walk the small paths and one lady asking the €3 entrance fee. Abandoned places allow 'a sense of freedom, a place of possibility' that can host different forms of play – from the destructive, hedonistic or artistic to adventurous and exploratory. Additionally, spontaneous vegetation helps stimulate imagination, and is proven to be beneficial in children's playgrounds.

The tangible passing of time, shown through vegetation cycles, decaying textures and changing morphology is an ongoing palimpsest and brings us closer to a site-specific, authentic character, 'genius loci,' and grounds us within the continuum of time and space, evoking Kant's 'sublime.' The abandoned place offers an alternative to the predictable spaces in our everyday lives and becomes: *'a means to critique*

the over-regulated way contemporary urban space is formed' (Edensor, 2005, 94).

Ecologically speaking, the abandoned places could offer a place for wildlife biodiversity and spontaneous succession within the urban fabric (Kawata, 2014), offering room for species that find no place in intensified agriculture (Harrison & Davies, 2002; Kowarik, 2013; Schwarz, 1980). The wild vegetation growing in abandoned terrain can develop freely from human control, and holds the potential to develop entire new biotopes, where the former extinction of species shapes new balances (Sukopp, Blume, & Kunick, 1979).

Play can be seen as a way to learn, to step in to the unknown. In this way, it can become a way to approach fear. Through play or a playful approach, we learn to explore our boundaries. From a young age, mammals use play to explore their social relationships and physical boundaries, which is recognised in for example the role of relatively rough materials and wild vegetation in children playgrounds (R. D. Nilsen, in: James & James, 2008).

The Dutch historian Huizinga placed great importance on play in the organization of society, and the production of culture in particular. He identified play as an independent phenomenon. His definition, in his book 'Homo Ludens,' states that play has its own purpose and space. It has six characteristics: (1) game or play is a free act outside the everyday; (2) without direct purpose or material end; (3) that unfolds within a dedicated space and time; (4) that is rule-bound; (5) that is often associated with a club or specialized society; and (6) that is often partly hidden or disguised (Huizinga, 1938). Tim Edensor, a social geographer, explores the experience and meaning of abandoned industrial buildings. He points out that abandoned places are locations for all different kind of forms of play- from destructive, hedonistic, artistic to adventurous and explorative play (Edensor,

2005) that help opening imagination and 'invigorate the soul' (Brown, 2009).

Destructive play: given the lack of surveillance and lack of value attributed to places that are abandoned, we can find practices that the author calls 'destructive play.' These practices might be seen as vandalism elsewhere, but here there is nobody who seems to care about it. Examples of this are smashed windows, tables thrown from the upper floors, even bricks that are smashed to pieces. The possibility of doing things that are normally frowned upon means that we are able to test the limits of the material around us, getting a sense of what material really is.

Hedonistic play: The emergence of drug culture related to music such as acid house and rave, has often resulted in the organized use of abandoned places like industrial warehouses and factories that provide space for huge parties. On the one hand, the abandoned place can be a safe space where alcoholics and addicts can carry out their practices undisturbed, while on the other hand, these same spaces give opportunities to those less dependent on drugs and alcohol to experiment with them.

6.13 NATURPARK SÜDGELENDE

The aspect of play is continuously preserved to the Südgelände park, giving the sense that the broken materials and trees are left to their own devices, as well as the robust character of the new COR-TEN steel interventions. The original playfulness and raw character of the graffiti tunnel is preserved. However, it now has strict rules and time schedules. At the site, there will be no innovation of space in the architectural remains. In some parts, I was able to touch the decaying bricks. Children have the opportunity to create dens from fallen branches (Fig. 41).

Some paths cross existing trees, giving the illusion of their spontaneous freedom. The park has a closing time, abandoned locations are fenced off and straying off the path is restricted in most areas. New paths will not be created through informal use – there is no space for *elephant paths*.⁷² When I wandered off the designated paths, it wasn't long until I encountered a physical barrier. Other visitors kept looking at me, too. Entering an abandoned building was impossible. The strong contrasting design interventions of the pathways confine the visitor to the 'designed space.'

Time is clearly expressed by the remains of the abandoned buildings, and the reuse of materials as pathways. Metal rusts, stones decay. The intervention offers a tactile and visual experience with the weathered textures. The architecture reminds us how the space was long ago, and the new intervention does not disturb that. But it does not show how it was used in the forty years after its abandonment. The presence of the past and succession that developed in recent decades work as an indicator of time. The seasons are very noticeable through the presence of vegetation.

Trees grow, fall and break, mosses grow on neglected materials. It gives a clear sense of how abandoned places are subject to succession, and how long the place has been abandoned. It is almost impossible to find specific traces of people because they are always there. It becomes clear that the place is used primarily for tourism and leisure, combined with integrated urban nature. Except for the graffiti, only a small hut behind a fence gives any idea that the place must have been appropriated informally before. The phenomenological approach of this critique, with a seven-hour site

72 *Elephant paths.* The funny paths pedestrians or bikers make when taking a shortcut over the grass, defying the rules created by city planning.

visit and checklist, was aimed at empowering the voice of the abandoned place and approaching the Anthropocene Monster in a non-dualistic way – not a voice to be corrected, but to be embraced and maybe to learn to co-exist with its site-specific qualities. Can we learn from the transformation of Naturpark Südgelände's interventions?

The project did succeed in aestheticizing its wilderness for the wider public. It also succeeded in cultivating and intensifying biodiversity within an urban setting. Because of these social and ecological accomplishments, it could be said that the monster has been accepted. However, it is not left to be autonomous in any way: its current form is entirely dependent on human intervention. During the site visit, an analogy of the song 'Big Bird in a Small Cage' kept coming back to me: the original wildness of the site seemed to be caged within the metal bars of its COR-TEN steel interventions, while its raw look is maintained for show. To sing us a song – a song that we all love to sing along. A song about sensitivity to history and environmental problems, waving colorful feathers of hope which distract us from the guilty feeling that comes with the Anthropocene realization.

Unfortunately, this song does not prepare us for the Anthropocene-related challenges of the future, such as pollution, global warming and land exhaustion. Its landscape architecture elements, according to the investigated themes, do not prepare us to embrace the forsaken landscape. In order to get used to uncertainty, we might rely on, respect and adapt more to the qualities that existing monsters have for us: to 'love our monsters.' The Südgelände park interventions create the image of a sugar-coated post-apocalyptic future, while evicting many recent pre-existing realities.

It makes the place dependent on our existence, which is (again) an unequal relationship

– patronizing almost. In order to really co-exist with other, predictably less tameable Anthropocene monsters, it might be worth considering how such 'imperfect' sites and their original properties could become more autonomous, and really speak as the voice for their context.

We simply cannot afford to think that all these degraded sites can be transformed for show, hidden or just ignored. Could there be a middle ground? Could sites be approached and embraced, however neglected and wild they are? And if design intervenes, could it allow for wildness to develop autonomously. The biggest challenge for designers here might be how their imperfection can be approached with trust.

'You put a big bird in a small cage and it'll sing you a song... ..that we all love to sing along'

- song by Patrick Watson, 2009.

Pristine nature, or the idea of it, is a place we can exploit, fear, admire or protect. It is a romantic experience of nature being bigger than us, a place where the force of nature is not doubted but is separate from the self. Visiting the natural layer always means being in a novel place that is not colonized by human hands, which communicates the notion that humans are just visitors. A place without traces of ourselves. Here, the self is subjected to the totality and bigness of something other than our presence, which may result in an experience of humility and interconnectedness: it can be the 'sublime.'

Within a cultivated landscape, the traces of human dwelling are apparent. Here, nature is living beside us, partly manipulated for survival. It becomes clear that humanity is dependent on nature as a resource, and its laws are to be handled with care. However, humanity is not just clueless, and the way humanity knows how to live alongside nature has led to its success. Here, the self is guided by the seasons and in

praise of both its own ingenuity and the forces of nature.

In the urban layer, nature can be approached as decoration or as a systems-service and it seems to facilitate wellbeing. Nature is an extension of the human, and the world around us is designed by human hands – often causing blindness to slower than everyday processes, underestimating the urgency to adapt to its changes. The self is concerned with its own growth and leeches from its context without being aware of the invisible flows that have shaped the place.

Within the highly influenced Anthropocene layer, the ‘forsaken landscape’ is where nature and human influence have blended into one. This is because nature can no longer be seen as separate – the act of manipulation as evidence of human genius, but an interdependent species – and for our survival we should look not just for what we need for ourselves to grow, but for what we can contribute to our environments to live together: non-humans are no longer outside. Here, the self is aware of its consequences of being and the way its slightest actions steer the ongoing processes of the place towards a world full of life. The landscape can be perceived in various ways, which should all be brought together as different senses. An understanding of the large scale can provide the environment with integrated design.

The landscape architect can work by connecting stories that are too big and too small – all scales, from a doorknob to a water system, ecological effect to social-economic time-lines. It is about connecting with other places, other scales, without losing the essence of the specific place. In the spatial environment, the tactile and visual scales are important mediums in the communication of the design.

By encountering the potential of process, subjectivity and entanglement, the landscape

architect has the capacity to shape the interwoven character of nature, place and perception.

6.14 QUALITIES OF MATERIAL DECAY

Abandoned places can be seen as terrains vagues (I. de Solà-Morales, 1995, in: Tyner, 2014), which are celebrated for their ambiguous character and ‘loose space’ (Franck & Stevens, 2007). The architect group Stalker walks through abandoned places in Milan, Berlin, Lisbon, Santiago and more. Like the Situationists, their work results in maps based on drifting through abandoned locations (DeSilvey & Edensor, 2013). Contemporary landscape architects do not start on a design without having been to the site, where its specific aspects can be assessed in person. Site reading should never be a neutral analysis or separated from the rational and intuitive (Meyer, 2005). With the actual site visit, the act of walking plays an important role in becoming part of the dynamic change of the environment, where different modes of exploration, flow and reflection contribute to the design process (Schultz, 2014, p. 7). Site visits provide a contextualized understanding, revealing hidden visual and tactical qualities (Lassus, 1998, p.43) of, in this case, material decay. The locations I visited varied from Portugal’s coastline to the mountainous interior and the Azores archipelago. Experiential qualities as found in the material decay of these abandoned places have been encountered through inventive analysis:

An unfamiliar familiar experience is an experience that partly consists of known patterns, but innovation through decay leaves room for the unexpected. The displacement of everyday objects in completely non-rational ways: rare vegetation that grows with its own rules alongside familiar plants, the common sound of trains somewhere nearby contrasting

with strange crunches under our feet, colorful traces of rebellious human activities, the touch of pulverized concrete, splintered wood and the smell of oil, a weathered child's toy – these all contribute to 'material psychosis, a sense of other in the shape of the known: an 'uncanny' zombie landscape (Mori, 2012).

The abandoned place offers an alternative to the predictable spaces in our everyday lives, to the rest of the city that is shaped by traditional ideas that invisibly become hollow. The desire to create a clear purpose for ambiguity in spaces has only increased in recent years. The ruin becomes 'a means to critique the over-regulated way contemporary urban space is formed' (Edensor, 2005, p.94). Architect collective Stalker argues that continuity and penetration into abandoned areas enriches the whole context, by creating a confrontation with the unknown. Another quality of the abandoned place is its *unbreakable* character, inflicting a new attitude towards material as well as social rules. In an abandoned place, we can climb trees, play loud music, crush stones, draw on the walls, climb on roofs, wander through the forest. The lack of management also allows for natural succession that, on its own, contributes to the sense of wilderness.

The unbreakable, in the sense that the place is already 'broken,' evokes stout-heartedness: nothing is too fragile to touch, nor will you be prevented from straying off the path. This is a sense of freedom, a place of possibility (I. de Solà-Morales, 1995, in: Tyner, 2014). For independence and individuality against the powers of society, a truly public space would be the playground where we can explore borders (Simmel, 1903). Breaking into and trespassing in a place is a form of self-actualizing and allows the visitor to learn the boundaries of the self. This is recognized in some children's playgrounds with the use of raw materials and wild vegetation.

Time textures are the tangible material effects of weathering and entropy in material, that affect a sense of time. In natural vegetation, this is readable through succession and seasonal change. The loosening paint on a wooden door, fading letters on a wall, reminders of old traditions or simply rust and rot. Simultaneously, we can image the place as new: it is the understanding of an ongoing palimpsest (Corner, 1999). This evokes a feeling of temporality, and can connect us to a spirit of the place (Norberg-Schulz, 1980) in a larger context such as the meaning of the building and its relationship with phenomena on a wider scale. Decay also impacts the overall morphology and flows of the architecture, resulting in a labyrinth brought to life by time.

The breaking down of these materials creates conditions for vegetation to appear in different times, which on its own, alters the structure and accessibility of contra-space.

What position can designers take when working with the experiential qualities of abandoned places 'as found'? (Braae & Riesto, 2011; Lichtenstein & Schregenberger, 2001)? Danish landscape architect and scholar Ellen Braae proposes, in 'Beauty Redeemed,' four temporal paradigms for transforming post-industrial landscapes: difference, continuity, cultivation and optimization. Difference creates contrast between old and new, continuity is a 'translation and a creative retelling' of the past; cultivation 'makes active use of the temporal dimension to merge the past into a continuous and open present that is not determined by any notion of a particular future'; optimization aims for the perfect state of the object regardless of its time and context (Braae, 2015, p. 293-300). Catherine Heatherington gives design narrative approaches for wildscapes: the tabula rasa, a narrative of the past, process-oriented and extended relationships (C. Heatherington in: Jorgensen & Keenan (ed), 2012, p.171-186).

Cultivation and context-adaptive design approaches are more concerned with incremental change and being open to influence

by environmental factors: they have the requirement to be more inventive towards their context. They create conditions for external, unexpected factors that will be encountered in the design over time, much like inventive analysis – where they could become ways to frame ‘inventive transformations’ over a wicked scale and time-span.

Because of its industrial past, a long period of abandonment (resulting in different forms of social appropriation, natural succession and material decay) and a recent intervention that works with that past, I chose to investigate Naturpark Südgelände in Berlin and its interventions.

With the contrasts between old elements and new functions, natural succession during its abandonment, and its industrial past, the intervention fits the category of ‘difference and narrative of the past,’ the open narrative of changing functions, ‘continuity,’ while cultivation is somehow staged with the function of a public park, and the socio-economic reference of historical remains of the railways and functioning trains to relate to the context.

With a ‘*floating attention*,’ it becomes clear that the displacement and disorganization of the unfamiliar familiar in material decay is deliberately highlighted in this location. Nonetheless, some of these elements are sterilized and placed intentionally, taking away a level of disorder on a scale only natural chaos could set in motion. The decaying material is purposely used for this park’s identity. The pathways are clearly new and create a difference with the environment, using palimpsestic references, like the paths with the dimensions of the train tracks.

The unbreakable aspect is constantly preserved in this project, giving the sense that the broken materials and trees are left to their own processes, as well as the robust character of

the COR-TEN steel interventions. The original playfulness and raw character of the graffiti tunnel is retained even though it now has strict rules and time schedules. The irregular vegetation invites children to play, explore and be inventive. Nonetheless, the park has a closing time, abandoned locations are fenced off and straying off the path is not allowed throughout. The strongly contrasting design interventions of the pathways contribute to confining the visitor in the ‘designed space.’

Time textures are clearly expressed by the remains of the abandoned buildings, and the reuse of material as pathways. The rusty rails, the references to the trains and, in particular, the succession of trees that has developed over recent decades, work as an indicator of time, opening up the visitor to change, to the process of decay. Maybe the paradox here is that the staging of chaos takes away its ambiguity, the way a wild nature reserve depletes the nature of its wild and borderless state.

The existing qualities found in material decay are its familiar unfamiliarity, the unbreakable and time textures. Reviewing the Naturpark Südgelände, some of the project’s designed aspects did contradict the qualities found in abandoned places, as a significant degree of disorder and freedom was lost. Nonetheless, the project succeeded in acknowledging and working with the spontaneous vegetation, displacement and entropy existing on the site. Could the outcomes of this single case study help us learn about more what is important for designers to consider when dealing with material decay? To a certain degree, yes, it exemplifies and explores the meaning of the found qualities. But as a lead to follow, no: the review of a single case might not be sufficient for drawing conclusions about how designers could mediate the qualities of decay.

However, looking into Naturpark Südgelande did demonstrate how the deep understanding of places through inventive analysis leads to conclusions about important aspects of sites, and how these qualities can be interpreted for design. The role of inventive analysis, therefore, lies at the heart of this section. By intervening with abandoned places, inventive analysis works to open up to the overlooked qualities of the place, so designers can engage with the emerging qualities at the site or the altered experience of the site.

This journey illuminates why designers could use the inventive analysis in order to be open to the specific qualities of decay, but not necessarily being prescriptive as to how. It may contradict its open nature to create a method, but further investigation could clarify tools for ways of carrying out inventive analysis.

CONCLUSION: AN OBLIGATION TO DISOBEY

A plea for play and for disobeying the rules of daily life

A more receptive approach to the environment is required. If designers notice the existing qualities of the context, this will nuance the design transformation. Inventive analysis creates the possibility of being open to encounters within site visitation and the design process. The landscape designer can consider inventive analysis when engaging with decay, as it holds site-specific, time and contextual configurations. Space changes us. The way space is organized changes the way we relate to each other, nature, ideas, history. What is written in the space shows what we hide, cherish and fear. Changing that language affects our thinking.

We are the space we live in: we become our environment, and the environment is altered by our ways. From an Anthropocene perspective,

the layers in our environment are more and more reflections of ourselves – anthropocentric. Screens, statues, even parks represent us. Rather than putting yet another ‘Apollonian,’ architecturally purified human layer on the landscape, the designer can work with what they find. What is found seems to be entirely pure: everything is becoming everything else. The complexity of the land, such as it is, cannot be simplified by thought.

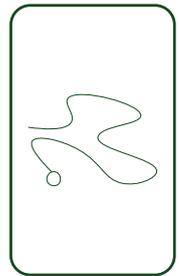
This is where the researcher-designer can step into becoming the landscape: the embodied experience can reveal those latent qualities as discussed in the last chapter. Visiting wildscapes plays an important part. With the embodied experience of other spaces, the designer-researcher has the opportunity to unlearn their ideas of opposition and become aware of the disciplined manners they have learned, which involves translating space or the visual into the understandings of a certain institution. A schooling that easily dominates the vulnerable creative mind: when brought up with a certain value system of which we are unaware, the same actions follow.

Personal experiences are stories that connect to other stories. In this process, it is essential to have the ability to live in openness and uncertainty: to wander. This is the practice of monster-loving, taking otherness as part of ourselves.

In order to become an ‘other,’ we have to break the mold of familiarity. When visiting sites, the values imposed on the space can become clear. This can happen through understanding the different continuations of the site and by rebelling against the paths design has laid out for the user. By ‘breaking the rules’ of the site, new layers become apparent.

Disobedience is very much linked to the idea of design as activism. Entering abandoned places can be a criticism of land ownership, for

example. However, the idea of disobedience does not have to be expressed through physical 'burglar' approaches alone. Every action is an intervention with invisible effects. Every effect intervenes with invisible actions. Keeping urgency in mind, there is not always time to ask for permission. The point is that designers should be aware of whether they follow the written rules of former design values. The designer and researcher have to be critical, which results in design agency facing the Anthropocene with **an obligation to disobey**.



WANDER

get lost;
wander off the
path;
trust a path
will be found
by walking it

break into
places that
resist, they
might want to
tell something

be aware how
context alters
choices.

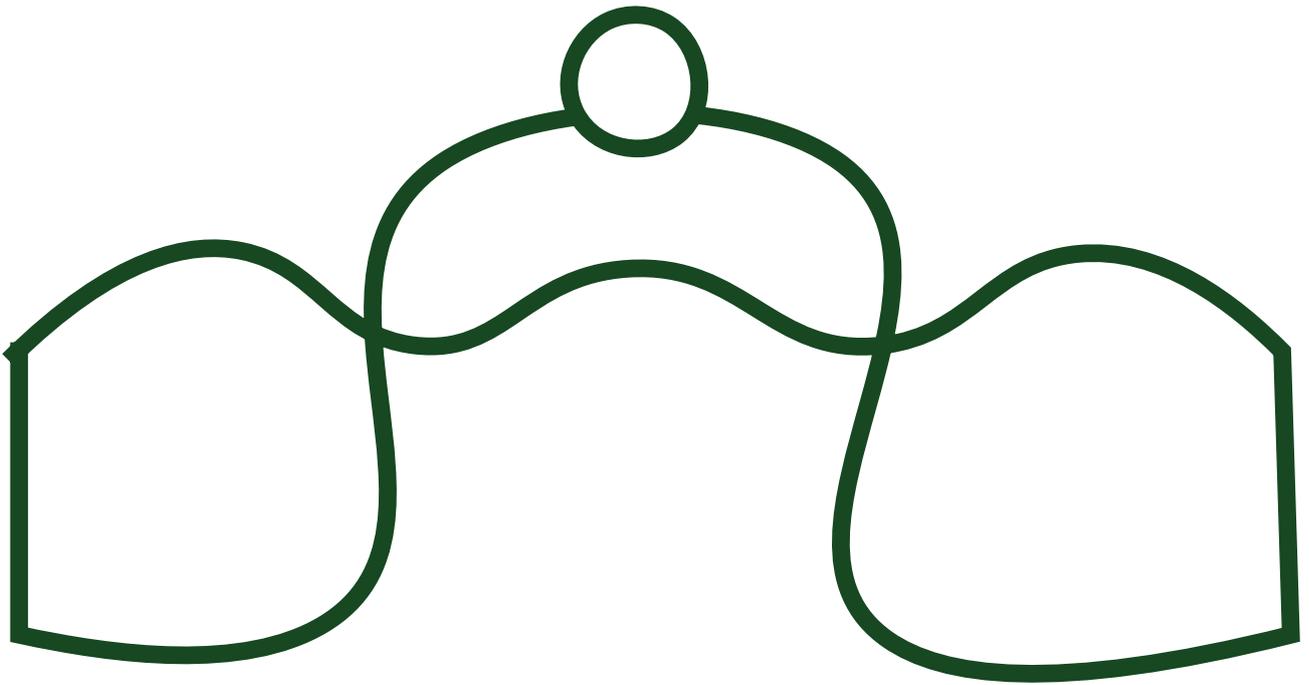
we are
vulnerable
to our
surroundings

connect the
direct context
to concepts.

use them
to speak to
surroundings

break the rules
of everyday life

climb a fence,
ask a question

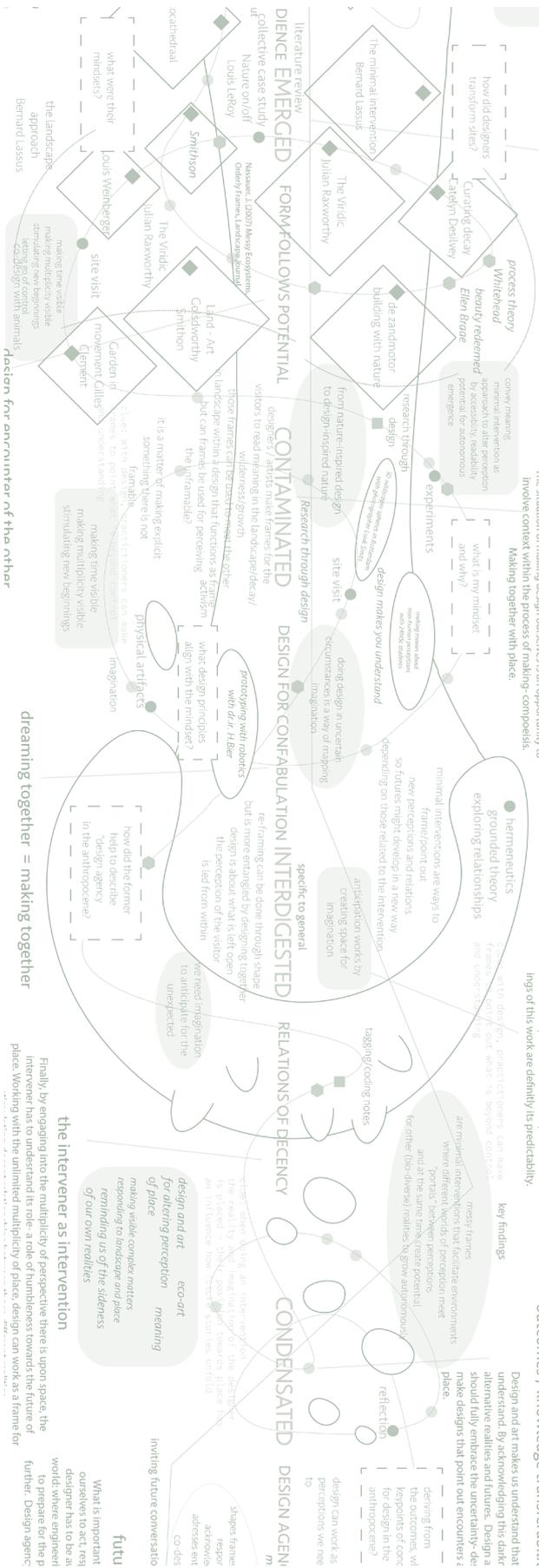


ontstaan
originar
emerge
verb

1 a policeman emerged from the alley: come out, appear, come into view, become visible, make an appearance; turn up, spring up, come up, surface, crop up, pop up; materialize, manifest oneself, arise, proceed, issue, come forth, emanate. ANTONYMS disappear

2 the results were collected and several unexpected facts emerged: become known, become apparent, become evident, be revealed, come to light, come out, transpire, come to the fore, enter the picture, unfold, turn out, prove to be the case; become common knowledge, get around.

mosaic 5: EMERGED reflecting with projects



7.1 A MATTER OF MINDSET

Landscape architects read and alter space in particular ways, where they are sensitive and insensitive to unseen problems and opportunities. How can they create room for unseen opportunities? This chapter researches a 'collective case study' of design mentalities and projects that represent the emergent, spontaneous, unexpected and unfamiliar through different ways of framing, articulating, visualizing or even embodying ongoing processes, new beginnings and non-human experiences.

I have visited places, sketched, read books about projects, examined photos and archives, collecting many references from practitioners and their projects. This chapter focusses on the projects of others that have been discussed during the PhD. They are garden designs, art projects, performances, landscape architecture works and hypothetical works. As we have seen in the previous mosaics, the site as it is can be approached critically by looking further than the design articulation, the way these works steer their inhabitants' behavior.

Questions posed in this chapter include: how have designers and artists transformed sites while being sensitive to the spontaneous and emergent? How did their physical intervention become autonomous in making the site's qualities more visible? And what kind of mindset does their design represent? What reason lies behind it? In this sense, this chapter has a strong link with the 'Submerged' chapter.

Within the scope of this thesis, the extent to which those framings communicate the co-existence of unexpected realities matters. The message of a project could be: 'there is non-human autonomy beyond your understanding and control.' By tapping into the senses of the visitor, landscape architects have many

ways of communicating those realms of the other. It is not about framing boundaries or steering powers: it is about a creative system that responds to the emerging character – and therefore the need for territorialization of the human self has to dance and take a step back and make decisions about how design can inspire a new unfolding of the place. Form and aesthetic are just tools to facilitate the potential of the emergent. We look at real and fictional projects that are applied expressions of theory and experience. I use these fictional projects as a comparison with other design projects – those sketches are pivots for reaching into projects and discussing how they relate with the positioning and how they give me a certain position as a designer. The choice of these projects is arbitrary and contextual. I am aware that I am biased towards what was made visible to me.

'[k]nowledges do not float free from their contexts of production and cannot arrive any old way. They travel well-worn paths, and are preconditioned by other academic knowledges, knowledge producing apparatuses, and institutional arrangements'

(Hall & Sanders, 2015, p.454).

7.2 UNINTENTIONALITY

Nassauer notes that people take pride in the familiar, and that they are unlikely to be open to messiness or the unintentional: cultural expectations will continue to be measures of ecological function, at least in everyday experience (J. Nassauer, 2007; J. I. Nassauer, 1995). However, to improve socio-ecological wellbeing, cities need to have access to wilderness for human experiences and biodiversity (Kowarik, 2018). Designers in the Anthropocene need to be concerned with process and relationships, rather than results. The point is that designers cannot always see, predict or guide those processes.

Strategically, we need a project approach that is open ended and works merely to stimulate emergence and autonomous balancing of what is beyond control. The approach for the unintentional welcomes 'the philosophy of letting go.' In literature, we can find many process-oriented approaches related to design with nature.

Ian McHarg paved the path for design with nature (McHarg & History, 1969), Norbert Kühn works with spontaneous vegetation as the basis for planting design in urban areas (Kühn, 2006); Jorgensen and Keenan discuss the socio-ecological qualities of *Wildscapes*, places of informal use and spontaneous vegetation (Jorgensen & Keenan, 2012); Raxworthy pleads for *the viridic* instead of the tectonic (Raxworthy, 2013); Gilles Clément calls for a *Third Landscape* as layer of spontaneity on top of our urban setting (Clément, 2015); DeSilvey advocates a curatorship of letting go of decaying heritage as alternative to conservation (DeSilvey, 2017); Barnett argues for stimulating emergence in landscape architecture to avoid maintaining *energy sinks* (Barnett, 2013) and Marris advocates rambunctious gardens, places of new wilderness in our midst, for pedagogical and ecological purposes (Marris, 2013). These authors, among many others, represent an interest in the benefits and opportunities of spontaneous processes. I think that intentions for the unintentional are a necessary response to the Anthropocene in connection with design.

They express an attitude of not taking control of situations while conditioning unintended cohabitation. The next paragraphs delve a little deeper into some of these references. In the follow sections I go a bit deeper. In her essay, 'Messy Ecosystems, Orderly Frames,' Joan Iverson Nassauer argues for containing the wilderness and messiness in our environments, where organized, neat looking designs could frame the undesired effects of naturalness. It is often the case that places have to look

neat, as the landscapes and environments inhabited by humans function not only as ecological systems, but also as communication systems. It is therefore logical that a sense of order and interaction is desired in projects with uncontrolled natural growth.

For ecologically rich landscapes to be sustained, they need to be recognized in everyday situations. Nassauer discusses *orderly frames* as a way to do this: straight lines that frame the messiness. It is a way to make 'ecological messiness' acceptable to the human eye and is, in that sense, anthropocentric (Nassauer, 2007).

As well as making wilderness readable through framing, Nassauer also proposes an 'in your face' approach: a landfill in every yard, corporate headquarters sited at chemical dumps and a sense of ecological justice towards flooding and drought. This requires people to accept what they regard as ugly or uncomfortable in exchange for what is attractive and familiar. She concludes that acknowledging the fact that people take pride in familiar landscapes, it is unlikely that they will be open to this kind of idea: cultural expectations will continue to be measures of ecological function, at least in everyday experience. Orderly frames are thus a way to guard ecological qualities within a framework that residents can recognize culturally. They mark the presence of ecological qualities, recognized by the human eye (Nassauer, 2007, p. 169). In 'Urban vacancy and land use legacies' Joan Iverson Nassauer and Julie Raskin research the ecologies of abandonment in Detroit and have written about the social and psychological benefits generated by small acts of ordering maintenance in otherwise derelict landscapes (J. I. Nassauer & Raskin, 2014). Here, they advocate new interdisciplinary approaches that synthesize urban ecological knowledge with social and cultural understanding of residents' perceptions and values.

How have designers framed those processes of messiness in their work? During the ECLAS conference in Ghent, I saw a presentation by Marc Treib, in which he referred to Nassauer's work. His images showed lawns with small squares of wildflowers. Sometimes a trunk was intentionally left: a literary interpretation of messy ecosystems, orderly frames. Aware of this, he called for more approaches and awareness that landscape design should implement more messiness. It seems that many landscapes consider Nassauer's approach: our preconceptions of beauty and recognition have to come first.

Stranded at a bus stop in the east of the Netherlands, I encountered a site full of similar wildflowers. It reminded me of the *in your face approach* Nassauer proposed. This spatial frame might work for keeping messy plants in order, though small animals and insects cannot be contained there. In fact, all ecological systems are entangled with much larger scales around them. And in addition to this complexity, there are processes present that will always skip those frames or will come up. So it is not about making a frame in which messiness might fit, but to allow messiness to become the framework and to adapt and react to ever-changing frameworks.

In her book 'Rambunctious Garden: Saving Nature in a Post-Wild World,' Emma Marris explains that instead of preserving nature in its pristine, pre-human state, which I earlier explained as 'first nature,' we now need to find a way for humans and nature to have a fuller relationship. Marris's proposal is to create the '*rambunctious garden*,' a hybrid of wilderness and human management. She offers different approaches for organizing those gardens. She particularly wants to encourage us to bring our children into contact with these new types of nature, to access it and play with it. Like me, she gives the name 'nature' to anywhere where life thrives – if it lives alongside us, desired or not.

People have influenced ecosystems since the beginning of time. We should define nature by the presence of thriving life and different active species (Marris, 2013).

Marris goes on to explain that national parks are heavily managed to contain certain ecosystems. It takes a lot of work to make those places look untouched. By keeping them stable in one way, places become more fragile. Nature therefore becomes very distanced from us. In many places we are not allowed to touch or climb a tree.

Nature should be available to everyone. Not many people go to national parks. Nature should be accessible to everyone. By intervening, we can give a voice to non-park nature. We cannot define nature as untouched. We have to let children touch new wilderness – this is the world of the future. The new wilderness aesthetic needs not to be in our face, but accessible as well.

Julian Raxworthy calls for a more connected and involved way for landscape architects to work with landscapes: not just to plan and conceptualize their meaning, but also to explore new ways for designers to leave their offices and learn about and experience growth and change in the landscape. With his manifesto, he proposes a way for landscape architects to embrace gardening.

This thesis is evidence of a need for a more emotional, intuitive understanding of time, as knowing how plants will develop in a certain location is a combination of many factors together. Intuition about how it will develop is one of them (Raxworthy, 2013). Raxworthy calls this a *manifesto for the Viridic* and it is a call for a more hands-on approach that will induce a more tactile and immersive stewardship of our planet. In this manifesto he calls for a different approach to plants: think about their desires, consciousness, character and even sexuality. Attributing those qualities to plants

might create empathy, equality and respect for plants and ecology which results in a more balanced, sensitive way of gardening- where more attention is given to action, emergence, mutual learning and understanding of process (Raxworthy, 2013, pp. 323-333).

In Barnett's book '*Emergence* in Landscape Architecture,' the author discusses the way landscape architecture can work with the processes that are happening in the surroundings. Barnett highlights working with this idea of emergence as the most important part. Non-linear encounters occur in non-linear landscapes, and any landscape is non-linear. How can those differential process be approached?

The more open a system is, the more vulnerable it is to action from the outside. Humans are in the system, as is language. Words create concepts and, in that way, landscapes are used the way we use words. Language frames systems and thinking, as Deleuze, too, argues in 'Difference and Repetition.' Open systems are always unpredictable, and so we live in a state of uncertainty and unpredictability.

According to Barnett, disturbance, difference, uncertainty and heterogeneity are four conditions of our existence through which we can understand that we have to work with emergence in landscape architecture. Materials, animals, humans and plants all have interactions with each other. Some are active, productive and empowering, others are passive, counterproductive and repressing. Landscape architecture is the act of organizing those interactions (Barnett, 2013).

Dealing with '*messiness*' is not only a matter of making growing vegetation accessible to the human mind. The material decay of our ruins also needs to be approached, as wildscapes are a combination of material decay and spontaneous vegetation. It is not only about growth, but also about the way decay is perceived. Decay

of material and of the stories told. Catelyn DeSilvey, a social geographer, speaks about 'curating decay.' In her reading, she contemplates how we can leave our monuments to decay, since their change through time tells an important story.

Leaving a lighthouse to decay and submerge into the sea, for example. She suggests that we should find ways to let projects decay in their own ways. Her approach constitutes cultural guidance to the decay of places (DeSilvey, 2017; DeSilvey & Edensor, 2013). In Chapter 6 of her book, DeSilvey contemplates the future of heritage and the difference between making and growing and how 'to accept the implications of a perspective where all structures and artefacts have biological as well as social lives, and all ecosystems have deeply cultural properties as well as natural ones.' This seeks a new practice that opens the visitor to a new interpretation of abandonment, decay and new wilderness.

Rewilding Europe is an organization concerned with bringing back and stimulating novel ecosystems on a larger scale throughout Europe. The organization has large areas for rewilding. Their interventions are mostly involved with bringing back indicator species, such as the Iberian Lynx in Spain and Portugal. For this project, it is important not to adopt a philosophy of 'bringing back,' but to acknowledge the existing nature. This is a relatively new movement that discusses different strategies for how to allow these projects to evolve.

The projects are informed by the reaction to their interventions (Jepson, 2018; Jørgensen, 2015; Lorimer & Driessen, 2014; Pereira & Navarro, 2015). Conversations with Marco Casagrande and a visit to his blog reveal a designer involved with this new view of the meaning of cities, mostly post-industrial. Marco coined the term 'Third Generation City' – or landscape – where a new balance must be

sought between ecological and social values (Casagrande, 2013).

As discussed in Chapter 2, we do not aim to answer complexity with denial, reverence or technocracy. Instead, we aim to acknowledge the hypercomplex and give space and optimism to what cannot be understood. Design needs to stimulate balance and be responsive to 'beyond control' contexts. We appeal to process rather than substance: an ontology of becoming (Deleuze, 1994; Whitehead, 1929). Generically-speaking, what we propose for the role of design in the Anthropocene is:

- Design for empowering ongoing spontaneous processes. Working to provide room for what emerges autonomously from existing processes, producing actions with the authenticity of a place;
- Design for visualizing processes to be accessed and experienced by humans. Making other stories visible influences the way humans relate to them. Projects need to contribute to the social accessibility of wilderness;
- Design for providing new connections between existing processes of collaboration. New encounters with processes to create new possibilities for 'copoiesis in terrapolis' (Haraway, 2016), making a world of coexistence.

7.3 (MINIMAL) INTERVENTIONS

In their study of the garden city, Jeff Risom and Maria Sisternas complained that when a regional policy applies to local conditions, it always fails to address the phenomenology of specific locations (2010).

'With close observation and tending, a designer can work with the complex system at hand. Being based on a broad understanding, subtle interventions can align with the subversive nature of their inherent processes'

(Stevens & Adhya, 2013).

Small changes can influence user behavior and nature beyond their conventionally linked scale or investment. The term 'urban acupuncture,' coined by Casagrande, is the idea that multiple small-scale projects can help organize local potential – and, accumulatively, have impact at a larger scale (Casagrande, 2010).

Landscape architect Bernard Lassus uses the term '*minimal intervention*' to describe the way tactical and small designs can impact the overall understanding of a landscape, '*how interventions produce transformation in the landscape experience*' (Robert B. Riley in: Lassus, 1998, p.9).

Concepts of the minimal intervention have many similarities to Rosalind Krauss's indexing in photography. They remind us of the land-art projects of Gordon Matta-Clark or Robert Smithson's Spiral Jetty. Indexing or illuminating abandoned places is considered a first step in the intervention.

My ambition is to search beyond, and show how minimal interventions spark ideas of openness, have an effect on people's future actions (Gibson, 2014) and stimulate future succession. Derived from the Latin word *intervenire*, (inter- 'between' + venire 'come'), the Oxford Dictionary explains 'to intervene' as follows: '*To take part in something so as to prevent or alter a result or course of events.*'

Minimal is explained as: 'the least or smallest amount or quantity possible, attainable, or required' Minimal interventions seldom alter an entire site, nor are they necessarily built

for permanence. Interventions therefore have a smaller physical footprint and can be less expensive. According to landscape architect and author Susan Herrington, interventions enable design to operate critically (Herrington, 2017). Critical towards space, but also towards time. How can design agency redefine the spatial environment for socio-ecological wellbeing in the Anthropocene? What is the role of design in the Anthropocene?

'Today, intervention in the existing city, in its residual spaces, in its folded interstices can no longer be either comfortable or efficacious in the manner postulated by the modern movement's efficient model of the enlightened tradition. How can architecture act in terrain vague without becoming an aggressive instrument of power and abstract reason? Undoubtedly through attention to continuity, not the continuity of the planned, efficient and legitimated city, but the flows, the energies, the rhythms established by the passing of time and the loss of limits. Marquand proposes the notion of continuity in contrast to the clarity and distinctness with which the strange world present itself to us. In the same way, we should treat the residual city with contradictory complicity that will not shatter the elements that maintain its continuity in time and space.'

(de Solà-Morales, 1995, p.5).

It involves, therefore, thinking about how architectural interventions could actually work in such manner, being sensitive to the qualities around, the ongoing processes.

The challenge of the minimal intervention is knowing how to allow the existing local processes to unfold. In 'New strategies for wicked problems,' the authors speak about different ways to integrate local knowledge and how to encourage resilience and empowerment of the small. It can be seen as a combination

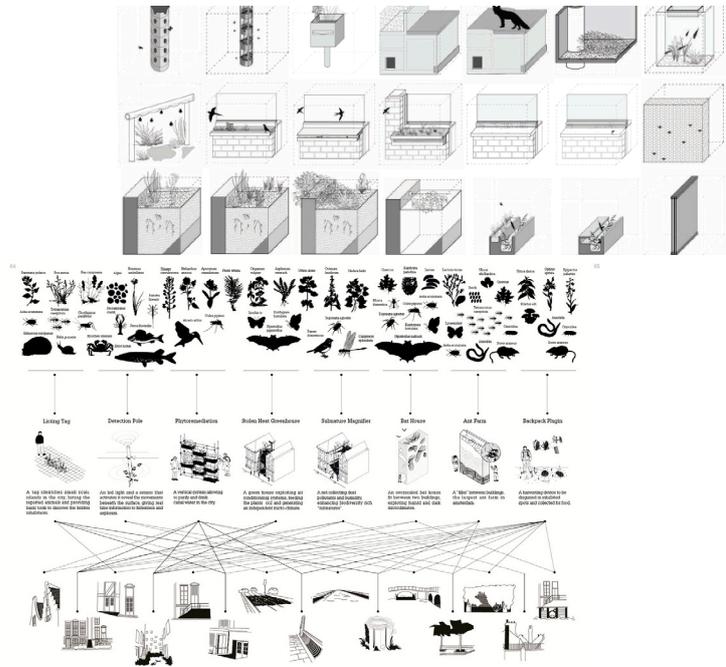
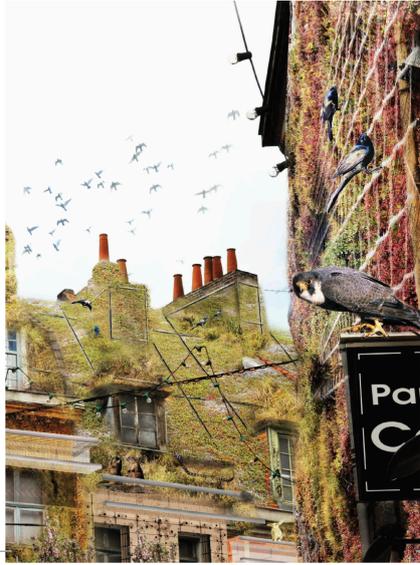


Fig. 42 *Biodiversity 2.0, Why Factory*. With this project, the authors imagined habitats for different species to consider their dwelling around architecture for humans.

INTEGRATING
ARCHITECTURE
WITH
ANIMAL
HABITATS

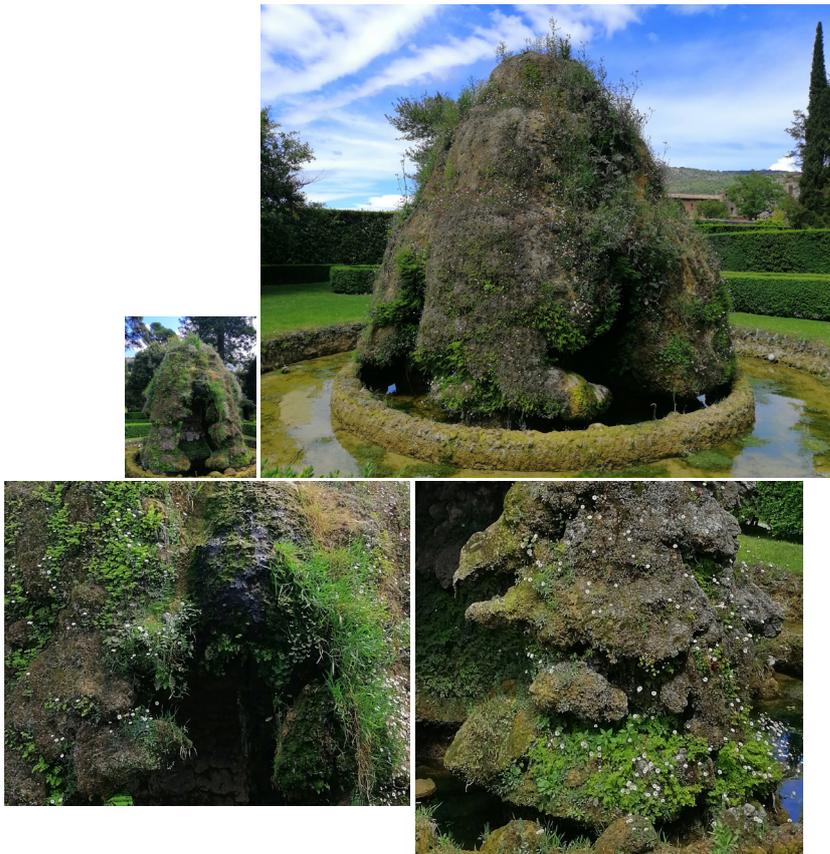


Fig. 43 *The Mette Fountains* in the Lower Gardens of Villa D'Este, a 16th Century Italian Renaissance Garden. The garden element creates space for spontaneous nature to emerge on the robust stones.

SETTING UP SPACE
FOR
WATER
FOR THE SPONTANEOUS

of the top-down, bottom-up approach. Here the placement and characteristics of the intervention are on a larger scale, but the development of such interventions depends on their use.

A non-intrusive way of altering space allows for a direct answer, offering solutions right now, which is a possible way to work with the urgency of the problems to be addressed. On the condition that interventions can answer to local knowledge and ongoing processes, they also have the potential to work with the complexity of the spatial problems. They will not necessarily solve the problem but might allow new dialogues around those problems to unfold, giving access to developments in the future (Weber, Lach, & Steel, 2017).

Minimal interventions must be receptive to their whole environments – and all actors in those environments. In that way, interventions have a dialogue with all life involved in the place. As such, they highlight the actors in the environment and address the issue of responsibility. This is also where interventions can be sensitive to their environments, and form relationship with other scales and time spans. Having seen that it is vital to work with the qualities and processes that are part of the existing place, new questions arise, questions that lie parallel with the issues of the Anthropocene:

How do architects and designers impose new projects on places that are sensitive to those streams? Can they be aware of all those issues? Can they allow their work to react to all the issues? How can an object form a relationship with or represent its environment?

One way to look at the relationship between objects and their surrounding is by looking at Rosalind Krauss's expanded field. Here, she discusses the context of sculpture and new relationships between site, landscape sculpture

and architecture, where she situates the works of artists like Richard Serra, Mary Miss and Robert Smithson. Here, sculpture seems to be explained as a way for place to be adapted – totally, partially or hardly at all. With the minimal intervention, the emphasis is on the object, but it is defined by its relationship to the context. Sculpture, in the expanded field, cannot represent the minimal intervention (Krauss, 1977). Building on the work of Rosalind Krauss, Elizabeth Meyer speaks about how landscape architecture can be placed in the picture.

Landscape architecture is different to landscape: in landscape architecture the architectonic alteration of the landscape and the way it refers to that landscape becomes a vital part. In her description, different types of landscape are explained in a more nuanced way. What stands out in this diagram is that the terms seem to be mostly explained by the way they alter space. The minimal intervention is not so much defined by form, but the way it alters different ongoing and emerging flows.

Having compared these two authors to the way I want to explain the minimal intervention, all that remains is to propose a second iteration of Krauss's diagram – this time working with the way landscape and architecture influence each other. In the diagram, we can first oppose the total transformation of landscape as against the minimal intervention. Total transformation can be carried out through architecture – manmade landscapes such as turning a forest into a shopping mall. In landscape architecture, too, this is the most conventional way of altering space: by changing the look, forcing flows into a new direction. We can see that sometimes two identical projects have completely different effects. In one area, it might become a place of crime, whereas in another, it flourishes. This is evidence of the fact that transformations are not achieved by morphology alone, the larger scale, in terms of time and space, or the landscape, is involved.



Fig. 44 'Strandbeesten' ('Beach Monsters') by Theo Janssen. The lifework of the artist is to build mechanical constructs that move through the energies of the wind. Since the installations look like monsters, they create empathy for natural processes. It is included to give an example that art can work to dramatise natural (invisible) processes. The work does not deal with decay or uncertainty. It uses natural processes to make the project come to life.



Fig. 45 De Zandmotor (the Sand Engine). An example of using the natural processes of nature as an instrument for human purposes - building with nature. This attitude demands an adaptive and open perspective: the island is built, but its future shape is left up to the sea and the wind. There is a deliberate approach of bringing awareness of the natural processes that are beyond human control, and the desired completed image is only achieved through nature's response to the human intervention.

Changes in space can be made through landscape, as the flows that describe landscapes alter the shape of the place: transformation through flows. This can relate to green, blue, and grey flows. The clearest way to imagine it is a river: its movement and flow shape landscapes. In time, the flow shapes riverbeds. A riverbed without flowing water is not alive. This is a major aspect of why time and scale are so important in landscape. Without time, the landscape is not alive and there is no potential for transformation. Without scale, there is no connection between different contexts and space is not influenced by its surroundings. The impact of these different flows, their continuity from landscape layers into the architectonic layers, can be defined as landscape emergence.

A connection with the larger scale is made increasingly explicit through the effects of time and flows on the architectural layer. Projects that combine landscape visions and small-scale interventions can be called land-art. Some of the best-known land-art projects are Robert Smithson's works in the seventies, such as the Spiral Jetty. The work is a typical land-art work as it forms a relationship with a larger scale of time and space. The spiral visualizes the depth of the water and the changing tides, which relate to the movement of the earth. This is an important aspect of the minimal intervention that can be abstracted: it links the spectator to a larger framework (Smithson, 1973).

In 'Evictions,' Rosalyn Deutsch explains how urban ideologies were combined to legitimize urban redevelopment, claiming to help all, but instead evicting the working class: the topic of gentrification is an ongoing issue in urban planning. Deutsche was critical about how following these kinds of ideals created a sterile and stiff public space, not open to change. She claims that conflict in public space is not undermining its democracy. On the contrary, she states that this is needed for the development of public space (Deutsche, 1996).

Her reasoning builds on Henri Lefebvre's social production of space, which claimed that space should be the result of these conflicts, a rebellion to existing normalizations of space, a 'space of differences.' The existing organization of space can be interpreted as an ideology. Thinking critically about this space opens up a dialogue about the meaning of this ideology. She points out the importance of these art interventions that indicated a context that was not visible to the residents.

If we think of an interpretation for the Anthropocene garden as the contemporary garden of love, the place to understand differences rather than to overcome, it becomes a political approach to multiple species. What happens if we see the inhabitants of earth as not ontologically distinct? Can we look at a design that works with more of a multi-species approach? If we see all life as nature-culture. By imposing new structures, we have to ask ourselves, what belongs to a place and what doesn't? According to whom?

What is natural to a region and what isn't? What is acceptable and what isn't? What non-human aspects can we include in design? The public realm is the unmitigated mosaic of beings. Given the contemporary political climate, thinking of others is a hot topic. As Latour argues with his concept of nature-culture, the key is to intersect the habitat sections of many different species. All beings need to live, need to eat. Food is a way to connect life. The problem faced by the designer in the Anthropocene is that of making decisions, choosing which systems to work with, how to frame communities. This readiness to be open to ideas can be the 'messy frame' approach. Other frames may be very different. Can they coexist with each other? This is the question of design. Can we plan for futures that we don't know? Can we stay open to the contingency of our framing, and not take it so seriously?



MAKING PROCESSES
OF ENTIRELY
VISIBLE
CHALK RAIN



Fig. 47 Chalk stones by Andy Goldsworthy. The objects challenge natural time and human experience.



Fig. 48 Reef Design Lab. The objects are frameworks for new life to populate. Through porosity and texture difference, the changes for new settlements are heightened.

SEA
FRAMEWORK
FOR
GROWTH
CORAL

In design in nature, we see the world within the framework of natural rules – the frame is the ‘law’ of nature. This results in patterns and organizations that emerge from nature. Often these patterns are mimicked in design. In all these approaches, the role of human management is still very important. Could there be a way to just carry out one intervention to encourage the local, unmanaged growth of the rambunctious garden in those forgotten and in-between places? I believe this can be achieved by making other worlds accessible, and also letting other worlds access our realms. What these projects essentially do is to reveal hidden landscapes, hidden non-anthropocentric views of the world. These views are necessary for creating new relationships with the non-human. Interventions related to landscape can create those connections.

Transformation is a process of design where we manipulate time, or the way time might develop. We don’t know the outcome. The word transformation hints that we come from something that existed before. As opposed to the idea that design comes from a blank sheet of paper, design as transformation is concerned with the background of the place. The word itself implies that there are past conditions. Everything is in transformation, but there are different modes and intensities.

There is a difference between architectural projection and production. Projection is the idea of a possible future scenario, whereas production is the result of the execution of the project. Here we can see that transformation lies in between projection and production – it seeks to prepare for future transformation while intervening in the space, to facilitate this transformation.

On April 16, 2018, I travelled to Berlin to visit some sites. The project that fitted best with the research was Naturpark Südgelände. This abandoned railroad, which I discussed in a conference paper for the design conference in

2018, was the perfect place to work with. In this work, I demonstrated the role of inventive analysis. This means to go to a site and allow oneself to be completely overwhelmed by it, trying to become part of it, and from this perspective look at the site transformation.

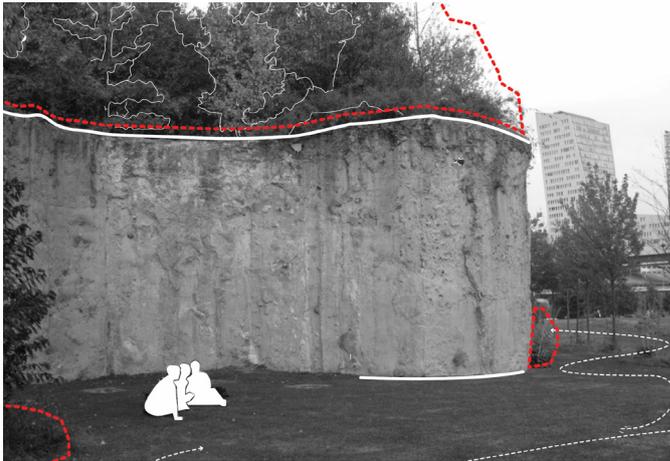
7.4 TRANSFORMATION STRATEGIES

In Ellen Braae’s ‘Beauty Redeemed,’ she speaks about different ways that projects that are decaying can be transformed into something new. But can we also look at places in a different way, where the transformation is not so much for human use? At the end of her book, ‘Beauty Redeemed,’ Braae speaks about ‘Transformation as design practice and theory.’ Here she gives four different approaches to the reuse and transformation of ruinous industrial landscapes. I will look at her four suggested paradigms of transformation and reflect on them.

With ***difference transformation***, the change in the new thing is traceable, because the new and the old are made completely clear. With difference, the past is sent even further back in time, where the project reclaims its place as a new beginning, a new interpretation, a re-colonization of the land. Past and present are separated. This allows both to exist at the same time. That is why this aspect works for museums or heritage projects.

Within ‘difference transformation,’ design looks at contrasts. Often the language of such a place becomes completely different. When we allow, for example, chaos and decay at the site, the new intervention sits on top of it as a new layer. This layer often looks very neat and clean and, in contrast, does not really merge into the old layer, not being subject to the same laws. The new work will stand the test of time.

With ***continuity***, we look at how the past can keep going in the same way as before. The interpretation of the past dictates the

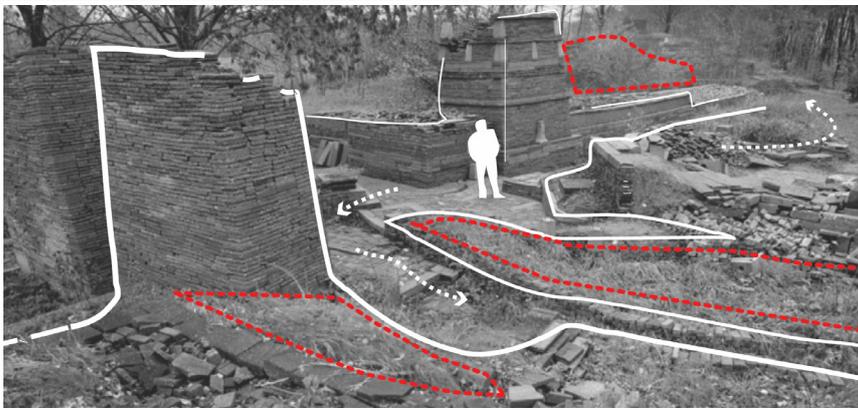


Derborance Island, Lille, France

A 2,500 square metres concrete rock, designed by Gilles Clément invites the "third landscape" in the urban environment. On the artificial rock, nature can develop undisturbed. As it is inaccessible to intervention, the space introduces a wilderness landscape within a dense urban context, that demonstrates the contrasting beauty of visible disorder and natural spontaneity

Ecocathedraal, Herenveen, The Netherlands

The Ecocathedraal project started with simply stacking leftover bricks gifted by the municipality. Its initiator LeRoy saw the wild, overgrown nature area as place where nature and humans could freely develop. The incremental building of walls and paths, provided a platform for dialogue and discussion on decay. This project builds upon continuous interventions that help heighten awareness to the processes (or transformation) of the site (Raxworthy, 2013: 133-167). This project's relevance for the paper is for the human dialogue with nature.



Natur-park Südgelände, Berlin, Germany

Over four decades of abandonment, this railyard became an untouched wilderness in an urban setting. The original railway wilderness had been altered by a new path system, succession maintenance and art objects. Buildings and machines are still in decay, but objects have been re-positioned for a heightened aesthetic display (Kowarik and Langer, 2005). It was included for its strong integration of post-industrial heritage, urban woodland and social function.



De Zandmotor, Kijkduin, the Netherlands

De Zandmotor ("sand engine") is a sand island in front of the coastline. The island project calls attention to the processes of entropy - how the forces of the sea and the wind cause a coastal fortification. This project can be seen as "building with nature": landscape forms evolve from the entropic development through a specific intervention (Roggema and van den Dobbelsteen, 2012). It was included in this review, since the island broadens the perspective of approaches towards decay: not as something to work against but with, for ecological and human benefits.

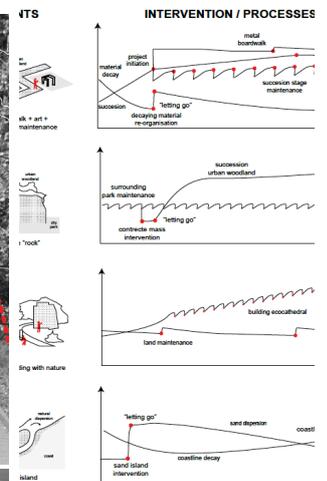


Fig. 49 Notes on boundaries between human and non-human territories (beyond control) with different projects (Oskam, Mota & Bobbink, 2018).

new interpretation of the now, to ensure that it maintains the narrative of the past. New interventions ought to work with interpretations of the past, representing their character and intentions. With continuity, there is the danger that we might skip the now – the past becomes the most dominant motivation for shaping the transformation, where the now is just an obstacle to overcome.

With *cultivation*, we look at the past and the future, and how over time an image of the future develops. The space is a vehicle of human use, that over time alters the place and constantly reinterprets its meaning. It is much like continuity, but introduces an aspect where programme and place interact. Here, there is a more open approach towards the moment, the now is present and becomes the vehicle for moving from the now to the future.

Optimization is transformation with a rather utilitarian approach: it looks at the landscape as something that needs to become more accessible, for example. The motivations for this come from technology and scientific values. Their hard language makes it hard to argue. This can be a restoring of language or a redevelopment of slopes in danger of collapse. Optimization is mostly concerned with the future and does not work much with the past. It is the production of a projection of the future (Braae, 2015).

All these transformation methods are concerned with altering the space into an understanding of the land as something new, a stage to be reached later in time. The projection of human thinking and dominant action on these places can mostly be seen. While these techniques can be very useful as a language to convey meanings and attitudes towards the past, they still are deeply subjective. Simply because the choice of which past and what to choose and when is a case of hermeneutics.

But in order to work as much as possible with the here and now, while we take the idea of the future, where we are open to change, as our pivot, we can see that cultivation is much more concerned with this idea of giving and taking. But it does focus on the meaning for human purpose. In order to work with the complexity of the Anthropocene landscape, the designer can work with minimal interventions within the architectural layer. The true character of the minimal intervention is always dependent on the context and the sensitivity of the designer in reading and being open to existing, ongoing processes at the site.

In any case, an intervention will change the existing balance and become a political act. This is a politics that can be justified from the perspective of the survival of earth. By making room for the existing processes to evolve, landscape resilience, increased biodiversity and human awareness of 'non-human life' and ever-changing nature can be stimulated. That is why this political position is taken. Plants need to be able to colonize and grow on in-between spaces, giving ecosystems room to adapt and mature.

Thinking about context as the starting point for a place, every change in the land is an intervention. The idea of intervention already works, therefore, with the idea of process and context. It is embedded within a scheme that has already been provided. The designer can go to a place and project a future idea, for example the idea of an abandoned train track being transformed into a bicycle path. Instead of trying to completely shape this idea into the utopian scenario they had imagined, a more realistic, ecological approach to the space can be adopted. In transformation, the projection undergoes mediation as a means of involving the entire context.

Intervention is not a desk practice, but one requiring presence and observation at the site, and action in the form of intervention. Being

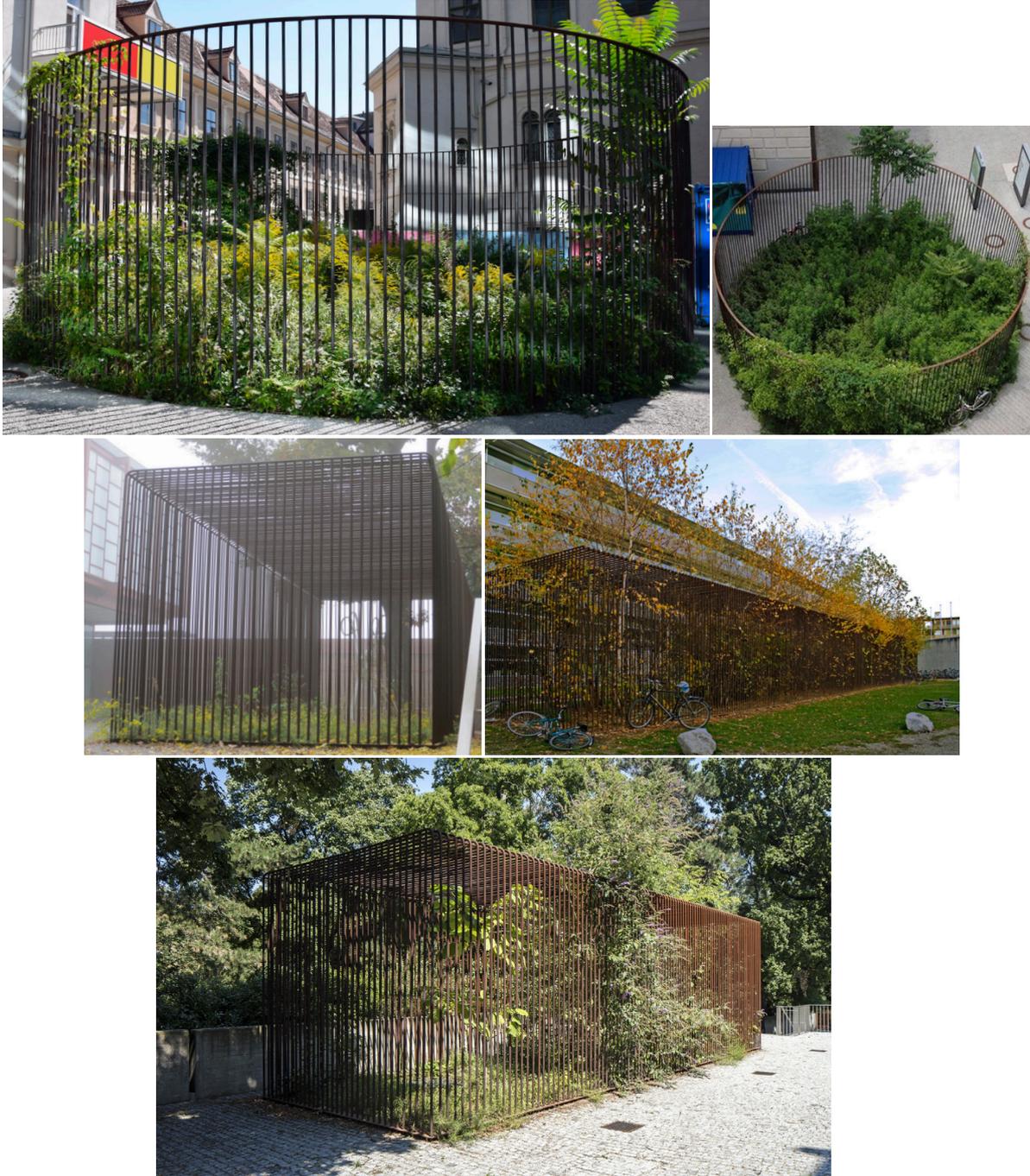


Fig. 48 *Wild cage* projects by Lois Weinberger. By securing spots in the middle of the city, the artist provides for guarded spaces, with contrasting experiences as effect.

GUARDING SPACE
 SKIN
 FOR WILDERNESS

present at the site is already an intervention. Intervention is therefore more concerned with the existing, being open to unexpected encounters and therefore differs from traditional design practice, where pre-modern production-oriented design principles combine with principles of projection. It is very important to stop projecting. It might be the architect's or shaper's urge to always impose projects on places, rather than looking at ways they can really design the site to be more vulnerable or responsive to existing energies. So, I wanted to take a moment to stop trying to make places more suitable for humans, or simply fit my training.

My idea about what a desirable landscape might be is, of course, biased, and often mobilized by commercial ends, growth, money, development, globalization, tourism. This is why I was attracted to places that had seemingly lost their value and were in locations where it was hard to develop this value again. I had many ideas to suggest. But I saw so many places, I realized I couldn't work on all of them. And more places are coming into existence all the time – nobody could change them all.

How could a landscape transform itself, on its own, using the existing qualities of the place without needing large investments to develop a new purpose or meaning for a multiplicity of users, without coming from one designer's bias? This is very much the idea of emergence in landscape architecture. It would be good to look back on those design projections and how they link to other works that are currently underway. This will help compare the positioning of the research with other designers, as well offering an insight into how other designers, intentionally or not, relate to the Anthropocene.

Finally, transforming flows is a way for a project to not necessarily change the physical aspects of the place – but involves the way flows through

the space can be stimulated or manipulated. On paper, the idea of a minimal intervention sounds feasible, but many questions about applying this strategy remain. How can we understand where the interventions should be placed? How should these interventions look? Who should make these interventions, and how should the designer make decisions about them? In relation to the bespoke spatial qualities, what themes should designers be particularly concerned with?

'When architecture and urban design project their desire onto a vacant space, a terrain vague, they seem incapable of doing anything other than introducing violent transformations, changing estrangement into citizenship, and striving at all costs to dissolve the uncontaminated magic of the obsolete in the realism of efficacy. To employ a terminology current in the aesthetics underlying Gilles Deleuze's thinking, architecture is forever on the side of forms, of the distant, of the optical and the figurative, while the divided individual of the contemporary city looks for forces instead of forms, for the incorporated instead of the distant, for the haptic instead of the optic, the rhizomatic instead of the figurative'
(de Solà-Morales, 1995, p. 4).

With words like haptic and rhizomatic, de Solà Morales seems to refer to a rather organic, self-organizing kind of growth, not decided by morphology but through the energies in play at the site. This is an idea of form following performance. While architecture and design are commonly concerned with form, how can physical interventions facilitate something that is invisible, not imposing form on the place? Bernard Lassus speaks about the minimal intervention and the need for 'Inventive Analysis' as a methodological approach. It seems that this way of looking at the environment resonates with the organic approach de Solà Morales was intending.



Fig. 45 *Ecocathedral* by Louis LeRoy is, as he called, a project that takes 1000 years. In this project, leftover tiles and bricks are used to let new human-made structures emerge alongside natural processes.

CULTIVATING
WARM
WINDS
ART
AS PART OF NATURE

'Coupled with the views, stories and memories of the site, its specificity and singular characteristics emerge. New hypotheses as to the past, present and future potential of the site are selected, refined and tested against studies that anticipate the way the project will be used and managed – leading to scenarios for the formal organization of the project'
(Lassus, 1998, p. 5).

Parallel to the terms stemming from semiotic play, we can connect the idea of landscape emergence and transforming flows as two characteristics of the minimal intervention. These actions are more involved with flow. We could say that minimal interventions aim to express and facilitate the ongoing processes of the place, which results in a policy where form follows the potential of flow, instead of flow following form. By way of partial conclusion, taking action becomes the ability to spot where and when to stimulate balance with minimal interventions, as if we are dealing with overwhelming but not yet fully understood complexity. Minimal interventions are 'totems' protecting multiple possible futures. Their form is defined by future potential rather than manifested by the maker's desire for a specific form. The minimal intervention might be a small physical act, but relates to knowledge of the process and being in harmony with the micro and macro. It requires having reservations about our own instant projections and knowledge of processes. I should add that minimal interventions produce transformation by depicting and interacting with processes. Drawing a conclusion from this, we can add to the previous three generic points (page 136) with another three specific points that outline the role of design in balancing and creating with contexts beyond control:

- How interventions can contribute to bringing a sense of ease with being beyond

control in situations;

- How unintentional happenings bring new experiences to the visitor;
- How projects can be seen as minimal interventions, redirecting the user's attention to the wider context.

7.5 DESIGN CLUES FROM PROJECTS

Landscape architecture is a discipline that deals with the balance between natural and cultural systems in our living environment. It touches on issues of control, the non-human, wicked problems, process, macro-micro and temporality (Buchanan, 1992; Marot, 1999). In relation to design for the unintentional, Nassauer uses the phrase 'orderly frames, messy ecosystems' as a way of making 'messy' wilderness acceptable in our cities. This communicates that as long as the messy is organized, we can tolerate it. Orderly frames are a way to guard ecological qualities within a framework that humans can recognize culturally (Nassauer, 2007). I argue that the framework should make people relate to messiness, to what they can't control.

In this section, I explain different landscape architecture projects underlying my perception of design process. These projects exemplify attitudes towards the unintentional and give us insight concerning how design can play a role in mediating collaborative work for living together in the Anthropocene. These projects result in a set of values and design proposals that fit 'intentions for the unintentional.'

Wild Cages (1991-2011- present), by Lois Weinberg (see Fig 48.). The wild cage / cube can be seen as an inverse enclosure, a room for nature. It literally frames space with spontaneous vegetation in the urban



Fig. 46 *Renaturation of River Aire* by Atelier Descombes Rampini. The project creates a framework to visualise entropy and natural processes through contrast.

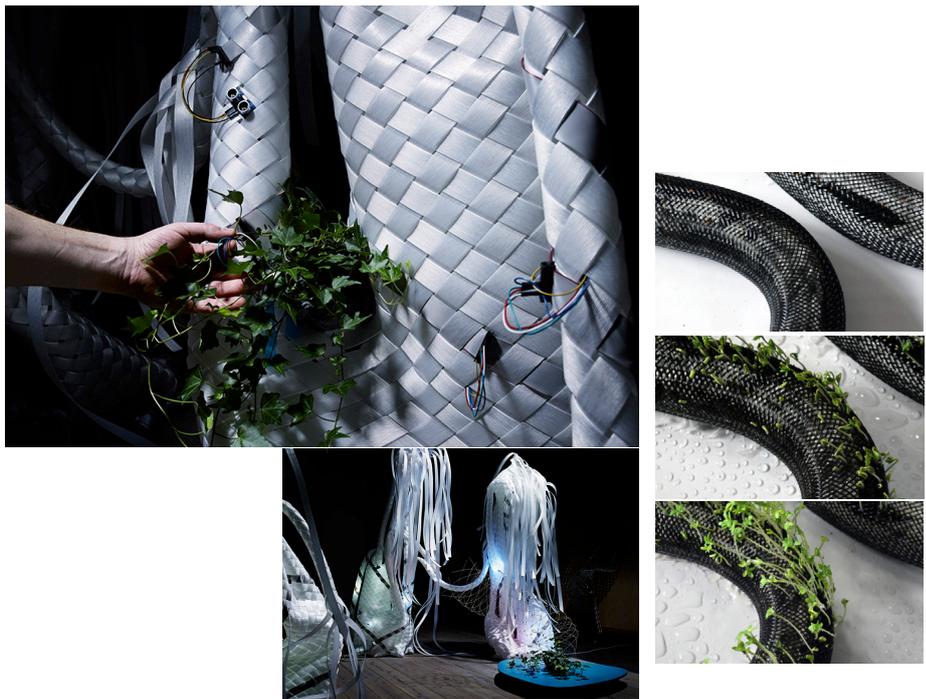


Fig. 47 *Flora Robotica* works on the collaboration of organic processes and robotics. Can plants and robots speak to each other, can they help each other to gain autonomy?

environment. The project creates room and visibility for the unintentional through minimal intervention. However, the intention of the project might not be clear to the casual observer. Will this contribute to feeling of ease with being out of control, or will pedestrians instead read this piece as a fenced wilderness? The framing is a boundary between the wilderness and control. It may contribute to being at ease with being out of control, but it has little chance of growing beyond its borders. The project is a minimal intervention.

Renaturation of River Aire, Geneva (2002-2015- present), by Atelier Descombes Rampini (see Fig. 46). In this project, we see design as a framework for nature to develop. The project stimulates difference and spontaneity while making this visible through the grid. From the late 19th century, the river was progressively canalized. To restore the river to a natural state, the project proposed a grid that shows the relationship between natural processes and design. The grid allowed for a diversity of flows to take place, so that different speeds and materials can occur at the site. It is a manifestation of becoming. The contrast between the grid and the effects of its flows make the process readable for the visitor. The project is a minimal intervention as it gives the conditions for complex processes to unfold.

The Living Seawalls Project (2015- present), by studio Reef Design Lab (see Fig. 47). In the living sea lab, 3D printed objects create possibilities for local species to attach to the porous, discongruent surface. It aims to stimulate the colonization of native species. The complex geometrical shape contrasts with the natural surroundings, rendering visible the colonization of endogenous species. This research project doesn't control the species' development, but rather shows how nature unfolds. In this research, a small device depicts larger and more complex process that could be implemented on wider landscape scales.

Plompe Toren (plan proposal), by Atelier de Lyon and Rietveld Landscape. This project visualizes a philosophy of letting go. The village of Koudekerke is one of many villages that has been abandoned having been taken over by the sea. Only the tower remains, protected by a dike. The project proposes to open the dike and let the sea take over. This simple action makes the process visible to visitors, allowing them to be surprised by the gradual changes in the landscape. Caitlin DeSilvey proposes something similar for an abandoned lighthouse in the UK, as a way to deal with cultural heritage as ongoing history while accepting permanent change (DeSilvey, 2017).

By creating room for change through the entry of ocean water, the project produces a transformation in the experience of landscape by depicting entropy and meaning. The project intentionally sets many other unintentional processes in motion by means of a minimal intervention.

The *Eco-cathedral* at Mildam, in the Netherlands, began when Le Roy arranged for recycled bricks to be dumped on his premises (Fig. 45). He started stacking these bricks into a series of piles, without any tools or mechanisms, merely using human labor and a module. The bricks are laid out in the style of a dry brick wall construction, without mortar. The bricks are loose and can move; this aids the process of, as Le Roy puts it: 'leaving gaps for nature' (Boukema & McIntyre 2002). These gaps allow for silt and soil movement and create microclimatic conditions for plants and weeds to start growing spontaneously. This dynamic interaction between human actions, organic growth as a reaction, and the material of the bricks forms the basis of the Eco-cathedral process.

The Eco-cathedral works with human interventions while letting nature 'rewild.' It is an example of natural regeneration and artistic

cultivation on former agricultural land, which results in the project being second, third and fourth nature. The Eco-cathedral is a new wilderness that encourages people's acceptance of spontaneity, where the interventions are a reaction to the behavior of natural processes and vice versa. The work is a dance between decay, spontaneous nature and people. The simple set of rules are a blueprint given by the initiating artist Louis Le Roy. In an intensified urban context, this project would have trouble maintaining these rules, as well as protecting the natural processes.

In order to protect the wilderness from human impact, certain measures need to be taken. Interaction with and playful exploration in wilderness can only be accomplished when nature has its own space, and its growth is considered at least equal to that of human visitors. The future development of this concept needs to find ways or create conditions to guarantee the growth of natural elements within their own processes.

Gustav Lange cut a piece of limestone into a perfect cube, configured in such a way that it revealed several of its material qualities on the edge. The cut face of the limestone revealed the changes in texture and pockets formed in the cube. Over time and due to weathering, water and freezing, expanding gaps started to form in the cube. The solid limestone became soil, which eventually supported plant growth. Within two or three years, the rock was gone. Cutting the limestone into a cube, rather than leaving it in a natural shape, forced specific outcomes to occur, related to the processes that influenced it. The fact that it was in the shape of a perfect cube accentuated the process of disintegration. The cube made the transformation visible (Raxworthy 2013).

Deborance Island, Parc Matisse, Lille (1995-present), by Gilles Clément (see Fig. 49). On the artificial rock, nature can develop

undisturbed. The space introduces a wilderness landscape within a dense urban context that demonstrates the contrasting beauty of visible disorder and natural spontaneity. It is a partly planted model forest in a natural setting on top of a concrete elevation (Gandy, 2013). 'Third landscape' becomes the opposite of the 'energy sink' of the surrounding park (Barnett, 2013). This project empowers spontaneous processes as it leaves room for them. However, this is less easy to perceive. In fact, the trees in front of the land were planted by those who perceive the artificial stone as disturbing. If the project creates a synergy between different actors, it is questionable. It is a minimal intervention as it conveys its meaning through the processes that unfold afterwards.

De Nieuwe Tuin is a project connected to het nieuwe instituut in Rotterdam. The makers created this place of wilderness as a response to the organized urban spaces in which we now live. The informality of the place invites wilderness to emerge. Surprisingly, it also becomes a place of social informality. Groups of youngsters and couples meet to find a more private oasis in the heart of the city.

The original plan, which included a telescope for an observation point at the edge of the site, could have helped enhance visibility of the wilderness within the city and deepened its aesthetic and ecological worth. As the project is now, a high border wall has been erected between the maintained park and the wilderness, which makes it difficult for the visitor to immerse themselves and acclimatize to the wilderness. Nonetheless, the wall is a point at which to shelter from social surveillance, providing a blind spot within the urban context. Therefore, a future project could work by bringing visitors closer to the wilderness, with this greater accessibility enhancing the presence and visibility of the wilderness.

Barnett's proposal for a *coyote project* deals

with plant species that support life for complex ecosystems. The project should be an assemblage open to adapting to changes. The plan was for a place where different species would meet. Effective contact and meeting places. Making new contacts and meetings, just to see how species would interact with each other. An act of engagement in the world. One of his projects mentioned in the book interests me particularly and is a design for coyotes and humans. Coyotes are smaller than wolves. Coyotes in public space travel with peers.

Their environment needs woodland trees and shrubs, rivers and streams to allow them to move and find food. Humans and coyotes have interacted throughout history. Coyotes are impossible to banish from some areas, they are part of the landscape. Originally, coyotes were found in eastern and western America. Commercial areas give coyotes anthropogenic sources of food. In his analysis, Rod Barnett identified five corridors where coyotes would walk into urban areas. The interventions that worked with these corridors were places where humans and animals can meet and interact. In this work, he applies aspects of emergence in landscape architecture. The interesting part is that design is actually used as device to frame the encounter between different territories.

The concept '*House of Nature*' is a compromise between preservation and restructuring. In the Netherlands, we see an Ambassador project by Rijksbouwmeester (Chief Government Architect) Floris Alkemade: former TBS-kliniek 'Oldenkotte,' turned into a 'House of Nature.' The idea is to let this place decay while developing biodiversity and experiences. The interventions are partly to stimulate biodiversity, to allow decay to express itself but also to make it accessible through artistic works.

Naturpark Südgelande was an abandoned railyard with thriving woodland succession – a 'pure' example of new wilderness (Fig. 41). The

boardwalk and art pieces that were introduced after decades of abandonment enhanced the user experience, which drew more people to the site, intensifying both the programming and maintenance, and ultimately limiting the spontaneous aspects of the overall experience. The additional park maintenance enhanced the biodiversity and created a controlled wilderness aesthetic, which made it more visually accessible to the visitor. Some decaying objects have been repositioned for aesthetic display, which helped create a strong identity for the park. The clear border of the boardwalk over the abandoned land, works with 'difference' (Braae, 2015).

A conflict arises between the integrity of the wilderness and democracy of space, in opposition to regulation and ownership; the abandoned buildings are no longer accessible, walking is confined to pathways and the graffiti tunnel can only be used for spraying on Monday afternoons. The project appears to embrace the visual experience of wilderness, accessed urban forestry and decaying heritage. However, this comes at a price as Naturpark Südgelande ultimately became a 'third nature' urban park, with the appearance of 'fourth nature.' To go beyond wilderness aesthetics towards a true acceptance of its spontaneity, future approaches could experiment more with limited, or open-ended programming, and less intensive interventions.

Zandmotor island is an example of using the natural processes of nature as an instrument for human purposes – building with nature (Fig. 49, bottom). This attitude demands an adaptive and open perspective: the island is built, but its future shape is left up to the sea and the wind. There is a deliberate approach of bringing awareness of the natural processes that are beyond human control, and the desired completed image is only achieved through nature's response to the human intervention.

Meanwhile, the project has achieved recognition, attracting tourists, kite-surfers and a diversity of bird species. The typical visitor experiences the ever-changing shape of the island, comprehending that it will eventually disappear. This idea of limitation and decline could emphasize temporal notions to the visitor and, in turn, help them accept the aspects that are inherent to new wilderness on abandoned lots.

Design, as well as being a way of altering space, can adopt the approach that is best for a particular reason, be it economic, political or something else. Design in the Anthropocene should be about making interventions that enrich, enhance and facilitate the wellbeing of all life. A place for life to thrive.

7.6 WHAT'S BEYOND CONTROL?

Landscape projects that advocate material decay and spontaneous nature approaches, provide a platform and a tipping point for acceptance of wilderness and processes beyond control. They can also demonstrate the value of their aesthetic, ecological and social benefits to the surroundings or broader context. This could bring the idea of a new wilderness to the next level, where it is not only valued while kept at a distance but adopted within the totality of the urban fabric.

In reviewing these projects, several conflicts between human and nature can be identified. These include: manicured wilderness aesthetic versus untouched authentic nature; authority-free wilderness versus clear constraints; accessible interactive wilderness versus protected territory; and finally allowing change versus maintaining predictable environments.

New wilderness projects could focus on facilitating transitional and adaptive borders between wilderness and intensely cultivated land, so interaction and spontaneous

development are made possible. In new wilderness, the distinction between the human sphere and inaccessible nature are gradual and changing. This requires working with accessibility, flexibility and contrast as primary guiding principles. Design could increase the acceptance of this dynamic by providing access, visibility and flexibility and making the differences readable through contrasting elements.

In reflecting on our conclusions related to shrinkage or decline, it is critical to be adaptable to the continuously changing borders between human, natural and new wilderness territories, and to be sensitive to the conflicts that arise. Landscape projects could help acknowledgement of new wilderness as a vital layer of our spatial environment, providing access to their potentials, and addressing the taboos and negative connotations of decline.

Projects can stimulate the existence and consciousness of entropy and biodiversity. Experiencing meaningful intentions for the unintentional can contribute to our understanding of why it is important to be at ease with being out of control in the Anthropocene.

As we can see with the example of Deborance Island, the aesthetics of the project remains an important issue. If perceived as undesirable, it is unlikely that it will communicate its meaning: in everyday life, people would not be open to messiness or the unintentional: cultural expectations will continue to be measures of ecological function (Nassauer, 2007).

The challenge for minimal interventions is therefore to seduce cultural expectations with other possibilities, by enabling meaningful experiences. The renaturation of the river Aire shows the process of entropy and life with drawings and photographs. The Plompe Toren intervention enables both the visitor and

Oosterschelde to act on the place by making it accessible. The wild cube clearly shows what will happen if no one can touch the site. It also communicates an intention for the unintentional.

It is a matter of seeing where it is best to leave things as they are and where interventions can contribute by redirecting attention to a wider context, or dealing with the new possibilities offered by not being hampered by the utopia of being always in control.

Minimal interventions are meaningful either when they impact the way people think and experience the landscape as a source of wellbeing, or when they influence natural processes to exceed previously regimented expectations. The most effective outcome is for both to happen simultaneously. Interaction with processes that happen beyond our control might make us more aware, humble and careful.

7.7 TOWARDS AGENCY

Going back to the main question of how we can define design in the Anthropocene, we can take from our work that in order to be responsive to the complexity of the Anthropocene it is important to think of it as an open-ended process. 'Design in the Anthropocene' should be concerned with empowering spontaneous processes and articulating them by making them perceivable. In that way, they can contribute to a feeling of ease with being beyond control, bringing the visitor new experiences. By shaping and placing them strategically, those experiencing them can interact with ease with the unintentional.

Landscape architecture and land-art projects can stimulate and visualize spontaneous processes through a 'simple' act or minimal intervention. Change can be made visible by proposing static frames as interventions.

Those static frames will be affected by the changes directed by their own ongoing flows. In order to facilitate this change, they have to be placed strategically to interact with the ongoing process. By stimulating one process, many others can follow. For greater success in interacting with process, the designer needs to be aware of some of those processes.

The projects show a readiness to work with the dynamics of entropy related to human and natural interventions – required in the third-generation city. Minimal interventions link self-organized processes and respect the intrinsic qualities of the space. This could provide new opportunities for wilderness to enter a tipping point – where it is valued for its aesthetic, ecological and social benefits to its direct surroundings. It could take the hybrid of nature and decay to the next level – where it is not only valued but adopted within the totality of the urban fabric.

The projects demonstrate how 'new wilderness' could be embraced as unique spaces that provide visibility and access to transformative notions of entropy. Besides facilitating ecological development, the challenge for the designer will be to alter the cultural perception of 'new wilderness' and do this through simple interventions, all the while maintaining an open-ended structure that will allow unexpected developments and site-specific character.

In order to interact with processes the designer is not aware of, the intervention should leave room for the unintentional, for new sets of interactions to happen. This can be done by leaving room for those processes to happen, and can be ensured by creating irregular shapes, using different materials, creating undefined space with different grades of accessibility for water, sunlight, plants, animals and humans: differences and porosity. This can also be done by placing the intervention at the border of different territories where fluctuations happen.

Semi-permeable borders create opportunities for different species to live and different processes to interact. They are aspects that condition life and entropy.

The only way to find out what unintentional processes might unfold is to recognize ongoing processes at the site and see how they unfold. This requires knowledge and sensitivity that is dependent on context and is best acquired through experience and experimentation. However, to be experienced, it is important that the message for the unintentional is intentional. Visiting and contemplating the meaning and means of these projects results in a set of design principles. On the one hand, they are related to a mindset, while on the other hand, they can be exemplified with several suggestions for how to materialize that mindset.

CONCLUSION: FORM FOLLOWS POTENTIAL

A plea for design to create conditions for the emergent

Designers and artists make frames for visitors to make meaning readable. This meaning can be articulated or signalled in the landscape through a certain frame that facilitates encounters between the self and the other, which break this opposition. On the one hand, we could say that it is about the way those projects help other realities to be read; but on the other hand, there is a problem of illiteracy in reading the landscape.

To work with the complexity of the Anthropocene landscape, the designer can apply minimal interventions. The character of the minimal intervention is defined by its receptiveness to the context, which is dependent on the designer's sensitivity to reading and being open to ongoing processes at the site. But that is not all: alteration itself plays its

own part from the moment it is implemented. Design interventions can increase empathy and attention to the aboriginal underneath. This can happen after the intervener has become part of the place. Art and design are here to change the perception of the landscape.

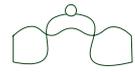
We could say that minimal interventions aim to express and facilitate the ongoing processes of the place, resulting in a policy where form is concerned with the relationships between actors. Because its form is merely an output, which is not to say that its aesthetic is never functional, the mindset behind design gestures becomes the core of the minimal intervention.

Under the conditions in which those interventions can frame places, answer to local knowledge and ongoing processes, they also contain the potential to work with the complexity of larger timeframes and scales. These will not necessarily solve the problem but might allow new dialogues for those problems to unfold, giving access to developments in the future. To work as a strategy, however, a mindset of potential needs to be distributed. Not in terms of the distribution of one project, but in terms of the distribution of interventions that work with positioned 'potential-thinking.' Designers need to take action in connection with their considered thoughts.

Design interventions are thus particularly meaningful when they either impact the way people think and experience change as a source for wellbeing, or when they influence processes to exceed previously regimented expectations. The most effective would be when both happen simultaneously. Interaction with processes that happen beyond our control might make us more aware, humble and careful, and more receptive to become together.

The common ground between these interventions is that they refer to the possible, the potential of place. None of the designs

is complete upon implementation – it is the fulfilment of the place through context and time, or the ‘whole story’ that completes the design. Designers can make frames to point out what is beyond our control and understanding. From nature-inspired design to design-inspired ecologies without nature. This causes the form of the design to be heavily influenced by its perceived potential: **form follows potential.**



EMERGE

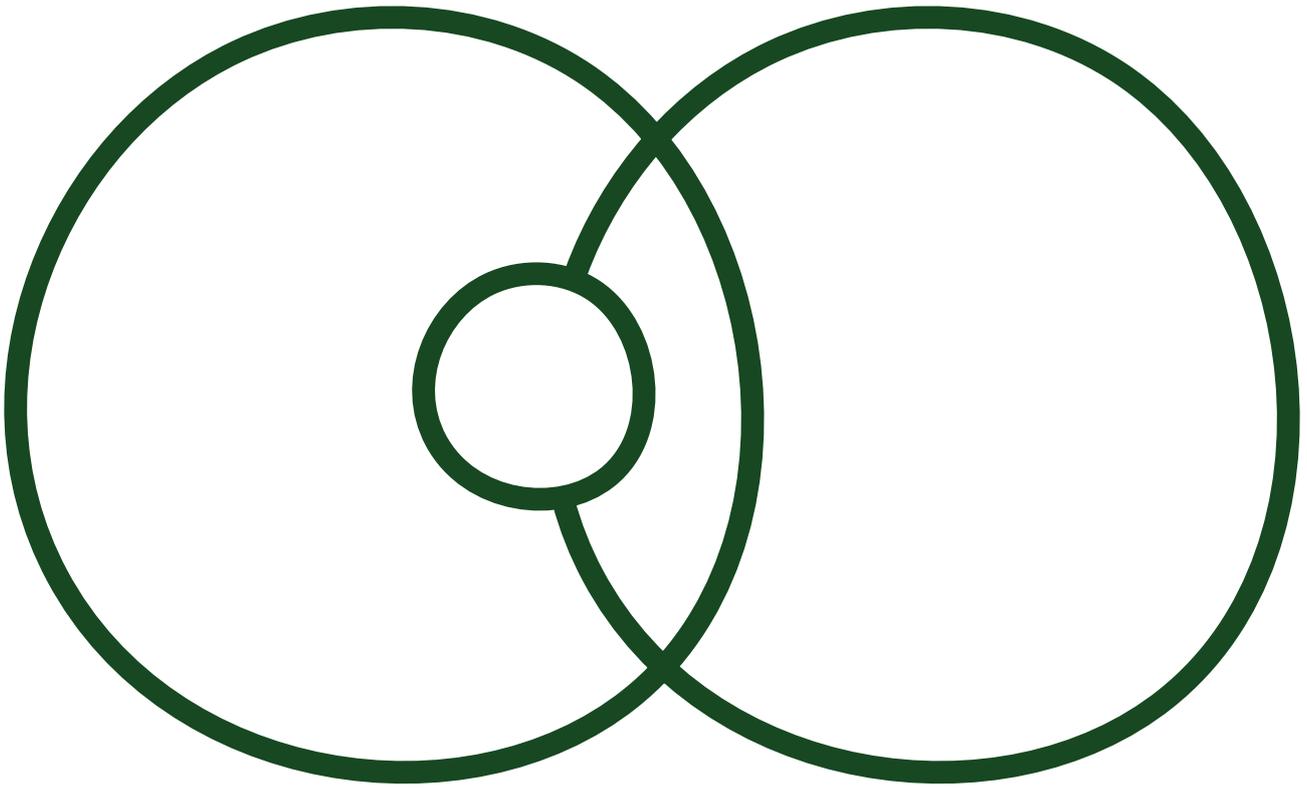
find strength
in the projects
and voices of
others; we are
not alone

redraw other
projects in
another
language,
re-enchant
other voices.
it honors them

be silent
sometimes.
projects can
speak on their
own

reveal
intentions
and what was
unintentional

perceive what
seemed hidden,
look at what is
found



besmet
afetado
contaminated

verb
the water supply was contaminated with ma-
nure: pollute, adulterate; make impure, defile,
debase, corrupt, taint, infect, blight, foul, spoil,
soil, mar, impair, stain, befoul; sully, tarnish; poi-
son; radioactivate; formal vitiate. ANTONYMS
purify

(Waite, 2009).

opportunity to involve context in the process of making – making becomes making together. It informs us about the difficulties of building the bridge between position and action. Translating ideas and ‘true stories’ into forms other than words can impact a wider range of dimensions and creates opportunities for a multitude of responses and attitudes to be discovered.

‘The time has come for new ways of telling true stories beyond civilizational first principles. Without Man and Nature, all creatures can come back to life, and men and women can express themselves without the strictures of a parochially imagined rationality. No longer relegated to whispers in the night, such stories might be simultaneously true and fabulous. How else can we account for the fact that anything is alive in the mess we have made?’
(Tsing, 2015, p.VII)

Questions asked in this chapter include: how could the knowledge acquired through past explorations translate into intervention? And how was the process of this work influenced by experiences? During the last six months of my research, I did several pilot projects that can eventually be merged into one. They built on earlier concepts in the design project. This chapter focuses mainly on describing the process and ideas behind actions taken.

These actions are a demonstration of a mindset of simple actions for designer’s agency in the Anthropocene. The findings of the other mosaics are embodied in this simple connection. Those mosaics are a vehicle for taking steps. I mean to unfold alongside the place, to respond beyond control, to love our monsters, to disobey, to let form and meaning be led by the potential for living together.

The idea is that all these parts come together as an active laboratory – the project is a live exhibition scattered around the city. The

argument made in this chapter is that simple interventions can visualize and frame decay or spontaneity in places. The methods used in this chapter include experiments, détournement, photography and scenario thinking, through design, site visitation and observation.

‘A practitioner who reflects-in-action tends to question the definition of his task, the theories-in-action that he brings to it, and the measures of performance by which he is controlled. And as he questions these things, he also questions elements of the organizational knowledge structure in which his functions are embedded’
(Schön, 1997, p. 337).

What is the added value of actions in research? Schön defends the role of action-reflection in the quote above. He underlines the development of knowledge through designing and experimenting, where documentation and communication are key. Research through design experiments with making new things and then uses the object to represent the discussion, where new assessments and often fictional tests described by scenarios help us take a fresh look at the object.

8.2 ANTHROPOCENE (DESIGN) ACTIONS

Since it is important to have a feeling of how the project will be interpreted by others, practice and knowledge are necessary. In this case, we can think of the researcher as doing the practice – a step towards ‘practice for reflection’ or action research.

The Anthropocene is an observation of the existing circumstances. It is not a matter of how we can change this situation, but how we perceive it, deal with it. This demands a less conventional mindset and a more adaptive capacity to act. In articulating the Anthropocene

as basis for a conceptual framework, there are three topics that can be emphasized by (design) actions and effects.

As discussed in Chapter 3, there is an urgency relating to how to act that comes from the huge influence of humans on Earth. Simultaneously, the notion of the Anthropocene does not see the world as a result of a decaying past, but tries to understand the world as it is right now. Because it is a fresh way of looking at existing problems, it is also an optimistic approach, seeing abundance in abandonment.

Secondly, in the Anthropocene, the relationship between nature and human is entangled: at its base, the notion of the Anthropocene claims it is no longer possible to frame these in separate boxes. In fact, it is time to see ecology without the concept of Nature (Morton, 2010). Some typical Anthropocene elements can show us this entanglement and offer possibilities for redefining the human-nature concepts for this epoch. In addition, this understanding adopts a humble position towards the complexity of the Anthropocene: so complex it is not possible to fix it with one (technocratic) solution, nor is there one desired outcome. It acknowledges wicked problems.

The third aspect comes from an awareness and 'zooming out' from humans as the deciding factor in the world, an awareness where rivers, animals and objects could be seen as equal entities within the composition of historical burden and responsibility.

Within the Anthropocene and its ambiguity, wherever one concept is turning into another, a big question mark is found in relation to who is responsible for what. In this sense the Anthropocene is a time of politics, where objects, nature and environment play a more prominent role.

Anthropocene matters can be linked to art

and design. Minimal interventions can be used to frame and indicate the presence of other perceptions and relationships so that futures might develop in a new way, depending on the character of the intervention. Designers can, with the open framing of minimal interventions, point out processes beyond control, make multiplicity perceivable and stimulate new beginnings. The project here is a mapping of place: a mapping through time, climate, entropy – a mapping created largely by the visitors' perception, but a story told by many others.

A 'worlding' together. Dreaming together through fictive storytelling creates relationships, and in these relationships new stories can unfold. By letting the stories of the other into the work, dreaming together becomes possible: collective anticipation of the future through making together: Anthropocene fiction. (Design) actions can focus on making honest, relatable and imperfect realities more accessible.

The following text is a proposal for the Micro-ruin lab. It is the idea from which the experiments have arisen. We can see that this text comes from the findings of the earlier mosaics. How can we live together? How can design play a role in (re)defining our environment in the Anthropocene to enhance a multispecies (socio-ecological) wellbeing?

8.3 PROPOSAL

Despite the growing world population (an estimated 12 billion by 2050), a large number of spaces have been abandoned and forgotten (Oswalt & Rieniets, 2006). The causes are related to rapid programmatic changes such as deindustrialization, population aging, migration to the city, political and economic shifts, cultural reframing or ineffective design. These places are residual spaces and while humans keep on building, the emptiness just increases. Ruins of the past are not likely to be attractive:

'That (...) the visions of merely fifty years ago, should now be in ruins is frightening, possibly explaining why they are being erased so quickly in growing cities.'
(DeSilvey & Edensor, 2013, p.117).

The consequences of such phenomena manifest themselves in a variety of spatial forms: abandoned villages and industrial buildings, neglected agricultural land, polluted and exhausted mines, WWII bunkers, nuclear reactors, etc. Unused residual spaces can also be found in the form of stalled projects and infrastructure due to speculation or ill-considered planning. With the current capitalist, aggressive way of dealing with space, the list only gets bigger. Increased social polarization and the decline of biodiversity on a global scale have an impact on the increase in abandoned, unused places.

Residual spaces in the city initially seem to have no value: either their purpose for nature and people seems unfulfilled, exhausted, or it is kept on hold for speculation. Viewed from a larger scale, underestimating forgotten land can constitute a threat. We can think of forest fires, which are partly caused by the abandonment of small-scale agriculture, or floods due to problems with the absorption of rainwater in the soil. These spaces also give us signs as to what is really going on in the landscape. Decaying buildings and wild vegetation contribute to a negative image: they evoke the idea of former glory. Municipalities often try to hide these images with scaffolding or demolition.

It is, however, in these spaces that we create a relationship with the wider landscape, and through the actions we carry out on this scale that we cultivate and nurture our relationships with each other (see the 3rd chapter 'Submerged').

In Rotterdam, many leftover spaces have been transformed into rain gardens, which help the city's water capacity and collection in the event of heavy rainfall. For example, the area around the Hofbogen reacts to this by making raingardens and a 'smart water storage'. To get on top of the Hofbogen line, the Luchtsingel responds to the interstitial space by deploying the leftover space as an infrastructure.

Activating these spaces often takes a lot of time and money, maintenance and attention. Based on the growing number of such places, this is not a sustainable option. Locations that cost energy to maintain are 'energy-sinks,' where energy is not stored but disappears. In addition, the strong order created by human oppression is not a sign of a collaborative urbanism, where different species are invited to work their flows in the space as indicators for the future. Furthermore, the concept of reactivating territories is usually approached from a commercial and anthropocentric point of view: the return must be visible to the investor in advance and is therefore often one-sided. This one-sidedness, in turn, poses a problem in dealing with the future in a resilient way. Can we find solutions to improve the socio-ecological value of those places that do not involve large investments? (see the 4th chapter 'Scattered').

Various researchers have concluded that unique animal and plant species dwell in forgotten places: 'fourth nature' or 'Industrienatur/ Industriekultur'. For example, zinc pansies grow in the polluted soil of the IBA Emscher Park, bats find shelter in vacant apartment buildings, and unique pioneers are found on construction sites. In some vacant lots, the biodiversity is even greater than in national parks. Their unique composition of decaying materials, shapes and processes in the landscape creates a wealth of micro-climates that benefit biodiversity.

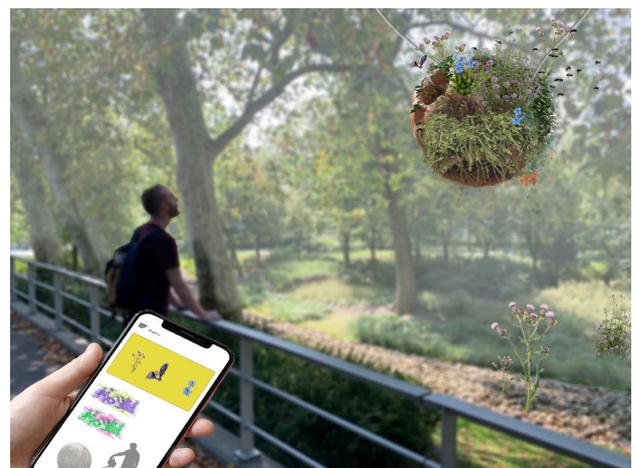


Fig. 53 *Microruin lab proposal.* 'Contaminated' from the studies before, the following proposal was made: a bio-cyber sphere that would gain autonomy and communicate with humans / non-humans about its state.

Terrain vague offers room for a creative experience and informal use of space that gives a new perspective (and escape / critique) to the rules of our daily lives. Contact with *wildscapes* plays an important role in child development as well.

The approach of non-park nature as a new form that is contingent and contextual, always with us in the mix, is one that future generations need to see as nature, to approach the world as an ever-connected organism of a multiplicity of socio-ecological balances, where space and urbanism are a vernacular of 'what is.' Design needs to deal with an unlearning of nature versus culture, guided by design agency that can go beyond aesthetics, shape, result and utility. A design agency that shows the richness and the potential for honesty of open-ended systems instead of the constitution of the western architectural institution. Form should follow performance. We have to change our idea of responsibility and imposition. Everyone needs to be able to build a home (see the 5th chapter 'Wandered').

Acknowledgment of imperfection, slow change, strangeness/otherness and decline, which these places stand for, reveals an important contemporary philosophical discussion in which it is necessary to respect the value of the other, unknown and unproven. This in itself is a necessity relating to the contemporary social, political and territorial debates that we are forced to approach when asking the question: 'how will we live together?'

We can differentiate between the dualistic nature vs. culture perspective, the unitary concept where the world of living things is structured by sociality, and approach the world as an unlimited number of milieus of different dimensions where the foundations of those milieus are not the objects themselves but their relationships. We can define our human position as 'in-betweenness,' defined by the overlapping

milieus around us (see 4th chapter 'Scattered'). The interventions for this project take shape in a recognizable design: 0.5-1-meter diameter 'planetoids' (Fig. 53), large enough to relate to the architecture of the site and mixed with materials from the site. This is achieved by developing several variants placed at different locations. By studying the micro-climates typical of leftover spaces, habitats are developed for various animal and plant species. Here all living things are treated as social actors. These interventions support the life that already exists at the location, but they can just as readily initiate new life.

Inside of the hulls of the 'planetoids,' room is made for earth, plants and insects/animals. The 'planetoids' can also work as sponges to contain water, be warmed by the sun or store nitrogen by growing specific nitrogen plants. The hull is made from biodegradable materials that relate to or come from the place, such as wood, clay, etc. Their material properties represent different temporal realities: some may exist for weeks, months or years, others may last several decades.

Some may be overgrown with mushrooms or flowers. Others may dry out or fall apart and become the start of new life in the soil. The hulls contain sensors that show, for example, location, temperature, humidity, acidic value, algae composition and/or movement via Arduino. Data is recorded and shared via the internet, where changes in the 'planetoids' are visualized to potential visitors as '*Tamagotchi*'⁷³-like living organisms.

The visitor can find the location of the bulbs on a digital map but will not see a route to the location itself (this is not in the system). The last hundred meters will therefore have to be discovered by the visitor alone. This ensures an

73 The *Tamagotchi* is a handheld digital pet that was created in Japan by Akihiro Yokoi of WiZ and Aki Maita of Bandai. (Wikipedia, 2020)

encounter with the location and the otherness of place itself. The voice given to the place by the micro-ruin 'totems,' can allow for a new 'druidism' of human visitors, where human and non-human phenomenology become entangled. The sensors process the data in a tangible visualization on an app, almost as if the spheres live inside. Here the 'bulbs' can indicate their location; it becomes clear what their character is (and that of the location). They can indicate whether they should perhaps be helped or left alone. Users can also upload their 'elephant path'. The sphere will have an influence on the immediate environment, which is made measurable by the sensor. The intervention gives access to normally unvisited locations in the city. This gives more insight into the existence of such locations and what is special about them. The idea is to find a way of sharing the problems of the context, why it is relevant, how designers can work with those problems and what we can learn from this exchange. I want to find a way to discuss these projects and share what we have learnt. The monitoring of the small interventions spread over the biennial on different locations, where data from humans as well as non-humans comes together. When monitoring the intervention, attention will be paid to social and ecological impact. The feedback will, on the one hand, promote the design itself and, on the other hand, lead to data that can be processed in an investigation at the end of the process. In this way, a link can be made between various designs and experiments and their impact on biodiversity and spatial perception.

I carried out four experiments to contemplate design agency beyond control. The life project was an exploration of the material of a seed ball and the discovery of how it develops over time. Five balls of organic material and seeds were made and monitored. The potential project scattered 35 of those seed balls around the city, and a photography project was carried out. Here, the intention was to search and map forgotten places of potential in the city.

The third project, perception, was done in collaboration with a course at the TU Delft.

This project challenged human perception by carrying out interventions that allow for change. From this perspective, in collaboration with the TU Delft, I made several designs for the campus. Finally, form is a collaboration with the Robotic Building Lab in Delft, which resulted in an exploration of form. The sum of these projects resulted in a blend that could be called a '*bio-cyber-sphere*'. In this section, I look a bit more closely at what the various processes of the project meant, how it contributed to a mindset of openness to the unintentional and how it links to the earlier discoveries made in this thesis, largely in relation to mindset and on a philosophical level.

The aim is to indicate the richness of wildlife that can be found in forgotten places and that nature is not separate from culture. An ecologist could help us determine micro climates and specific species. However, the mindset is that designers can't really know for who they are designing. The idea is that their interventions contribute to the development of unexpected new compositions. And that can be done by creating a diverse form. It is not our intention that the planetoid focuses on specific species – its intentions are for the unintentional.

Like insect hotels, the designs can provide a place for organisms to populate a place. It is an assumption that the porosity of this shape will contribute to the development of ecosystems: it hosts a multiplicity of habitats. The assumption is based on investigation of abandoned places, where organisms shelter in such diversity of habitats.

Abandoned places have been chosen because they offer space and time for the development of wildlife and can be centrally located in the city. The planetoid could play a role in bringing

people into contact with the qualities of the urban voids. The abandoned places can, instead of therefore also be appreciated in their wealth. The shape consists of a puzzle of different materials, where the sensors will remain in skeleton form.

Indeed, this part has not yet been extensively explored. The idea is that through sharing data about the place, the abandoned area can gain 'emotions' through a Tamagotchi-like programming. With the Tamagotchi the idea is that the user cares for the character. Depending on the care it evolves into different characters. This playful way of interacting with the sensor data can invoke a new relationship with the environment.

The aim is that the planetoid will represent life at the place. By giving it a voice, it could also communicate the negative consequences of human interaction. And that is as well what this thesis is trying to do. The shape will consist of a puzzle of different materials, where the sensors will remain in skeleton form. The change and transience of the place is indeed something that can also be found in Land Art. The intention of the planetoid is to make visitors curious and to let others look at nature. 'Nature' is in fact a mixture between cultural and natural processes.

All in all, the bottom line is that the planetoid in its current state is rather a first prototype. It is still under development which materials, form and application will be made.

8.4 LIFE / CARE

At the start of the *life* project, I experimented with different forms and shapes. Most of the experiments were ideas, drawings and sketches relating to the shape of the project. This part of the project represents the spontaneity of wild vegetation. The spheres were created out of organic material found around the landscape,

then mixed with wet hay and molded together by spinning a wire around them.

Some of the spheres were neglected, others were given water. As expected, the ones that were cared for flourished. The spheres that were hidden dried out and did not develop as much as the others. Simply put, the seed-balls were not growing autonomously, they needed a little help from their surroundings. When given the attention, they could grow and become autonomous. Or, in their design, they could have been created with a protection that could hold water, or even absorb it like a sponge.

It is further evidence that water means life. The next experiment would work more with strategic approaches to this. The lesson from this experiment, with its Dionysian approach, is more about the interaction with the environment and context than it is about the result. This project became focused on care-taking, rather than harvesting. It is obvious that life can grow, but looking at it more closely draws attention to the aesthetics of change.

8.5 POTENTIAL / LOCATION

With the assistance of photographer Luuk Smits, I created 35 spheres out of hay, wood, clay and seeds. To collect and assemble the material, we travelled to the banks of the river Mase. After creating the spheres, we placed them in various different positions at two sites in Rotterdam, a project about revealing location and *potential*. These properties make the balls possible sites for habitats and new places for growing life. By setting them up in May, when spring arrives in the Netherlands, I could study their unfolding. The search and placement were in themselves an intervention, a quest to mark places of potential. Potential for difference, change in the landscape. Then, following the changes every week would offer a new perspective of the changes to the site and the environment. In the

Annex, we can see a more thorough selection of photos that describe this process (Annex 2a-implementation & 2b - unfolding).

The spheres create a way of looking at the local properties of the landscape, as if they were a sample of it. They are mappings of what happens through time and thus inform us about processes: they make entropy, presence of life and growth perceivable. Unexpectedly, the projects revealed other sources present at the site. The spheres evoked relationships with humans and non-humans. Graffiti artists had sprayed them, in other places the spheres were even moved.

They demonstrate a type of play evoked by the site and the objects (Edensor, 2005; Jorgensen & Keenan, 2012). Over the months, the weather was extremely dry, so plants mainly only grew in shady and wet places. Rain did not offer much potential for the projects. Overall, the project contributed to a new insight into the invisible processes that play a role at the site. We can say that this potential-focused approach was a mapping of becoming. With the knowledge or intuition resulting from such interventions, we might be more sensitive to becoming and difference.

The right conditions are, quite obviously, that water and a diversity of sun /shade are needed for small plants to develop. The lesson learned was that carrying out the interventions at these places created a stronger awareness of the place. Firstly, the interventions drew attention to the place and made me care about its context. Secondly, because the objects were intended to represent or at least interact with their direct surrounding, the object drew attention to a larger framework of time and space. For example, the objects I had placed in the river Mase interacted with the tides, those at the terrain vague with the graffiti artists, while others remained the same, disappeared or faded away.

8.6 PERCEPTION

Initially, the idea was to carry out similar kind of decaying minimal interventions in collaboration with architecture students at the TU Delft, but in spring 2020, education was reduced to online contact due to the COVID-19 regulations. The studio therefore focused on making films and collaborative projects about how our environment can be perceived from a non-human angle.

Eventually, students of the 2020 Q4 elective in Landscape Architecture were able to work on a project to develop an 'eco-campus' where they combine the idea of interventions with a general strategy: the idea of minimal interventions as a way to map and see the work right now. The interventions were different ways of creating porosity in the landscape: digging a ditch, an 'Eco cathedral structure' and room for spontaneous vegetation at the parking lot. The structural shaping of the work is a way to make places for succession and for life to find a place – digging a building, conditions for growth. Growth in this sense means a greater diversity of human and non-human population.

The theme for the course became "Letting G(r)o(w)." This means: the strategy for creating conditions for emergence on site. Frameworks for enabling nature. Caring: minimal maintenance depending on human needs for understanding, having a comfortable role, like water, human spaces, the role of the site specific. Imagining: alternative scenarios making a story line, giving meaning. Three sites had been selected for the project: the paved section near the Bouwpub; the open area in front of the Jaffa cemetery around the Rietveld monument and the Mien Ruys park, close to Green Village. 'Letting grow' did not mean allowing everything to become a kind of primitive woodland, but it was about working with living nature, going 'with the flow' rather than against it. It is important to try to adopt a bottom-up

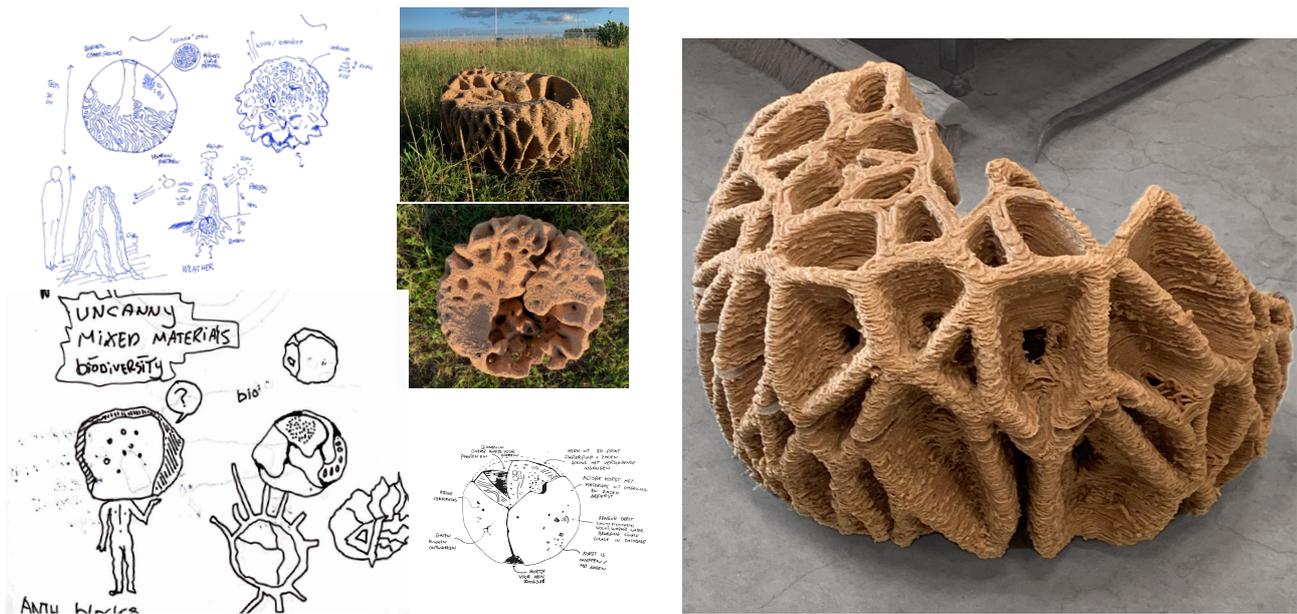


Fig. 54 The 'shape' project did work with Robotic Building, 3D robot printing and prototyping using Rhino and Grasshopper. The project was exhibited at the Dutch Design Week 2020.



Fig. 55 Continuation with Urban Reef
With startup Urban Reef founded by Pierre Oskam and Max Latour

approach, designing as you go and using what's already there. Spontaneous vegetation is often the most ecologically valuable, because it is primarily made up of local species that are a good match for the local animals and insects⁷⁴.

Built-up areas will become more 'bio-receptive' in order to increase the possibilities for different species to populate the area. In some place throughout the campus, paving was removed and reused to create 'eco structures'. The project was cost-effective and could start immediately, because it requires little new material or specialised expertise. As the name "Letting G(r) o(w)." suggests, the idea was to let the forces of nature take over the campus (or at least parts of it) and to shape these into a niche for various living species. While the basic functions of the campus will be respected, the strategy was to reduce excessive paving and waste in order to enable vegetation to grow spontaneously.

Wilderness, even at the campus of the TU Delft, is not perceived as welcome, most likely because it represents a lack of control, as seen in the work of Nassauer (2007). Projects that are, on the one hand, connected to a larger plan and, on the other hand, well represented on a smaller scale, might help projects to be accepted more readily. This is an example of intentions for the unintentional. It is a design strategy that needs to be complemented with unintentional interventions.

The difficulty is that to create this space, interventions need to be accessible to humans, and thus have to respond to an aesthetic that is perceivable and at the same time a condition for all kinds of life to exist. What we learned from this project is that there is a dilemma in creating places for humans and non-humans

simultaneously because, in the design of new human-objects, the human aesthetic will always be dominant. To think about a 'new wilderness' aesthetic that leans more towards this new attitude of the spontaneous and unexpected, we might experiment more with shapes that are beyond our direct understanding, that seem alien and natural at the same time. The uncanny experience of an object can help stimulate the visitor to look at it from another angle, while becoming more open to accepting and embracing strangeness in their environment.

8.7 SHAPE

With Robotic Building TU Delft, we organized the production of 3D printed artefacts that would experiment with this human and non-human aesthetic⁷⁵. Two versions: one is a series of experiments, the other a 3D printed object. For the clay, the programme was made so that it would follow a pattern with many curves, so the clay would behave differently all the time. As we can see, the clay sank, displaying the quality of the material and showing change over time.

This experiment was to demonstrate the hybrid quality of the natural and the artificial, or robotic. The experiment was a search for porosity and a visualization of intentions for the unintentional. A large amount of time was devoted to learning about the 3D scripting and printing techniques. The clay softness, amount of material, path of the printer, speed, form of the print all were complex factors, with no clarity as to what the result would be. First, the clay was too soft and the project would look like it was molten. Then the clay was too

74 Website displaying the 'perception' project: <https://www.tudelft.nl/en/stories/articles/urban-ecology-the-increasing-importance-of-nature-in-the-city/> access date 30 September 2020

75 Website displaying the 'shape' project: <http://www.roboticbuilding.eu/project/d2rp-for-product-from-landscape-microruin-lab/> access date 30 September 2020

hard, and the air compressor exploded. Finally, a consistent substance came out of the printer. However, the structure that was chosen for printing was not strong enough, which resulted in the collapse of the object.

The 'planetoids' were prototyped using Design-to-Robotic-Production and -Operation (D2RP&O) techniques (Bier, Cheng, Mostafavi, Anton, & Bodea, 2018). D2RP is used in this project by means of parametric design and robotic production and operation involving 3D printing with bioplastic from wood. Furthermore, D2RO techniques are used for the sensor-actuator systems integrated in order to track micro-climates within and around the 'planetoids.'

Multiple plants grow from a single 'planetoid'. Each sensor-actuator circuit focuses on one 'planetoid', measuring temperature, humidity and light. Temperature and humidity sensors are located below the surface of the 'planetoid,' where the roots of the plants are, while light sensors are located on the surface.

Data is streamed to an app, on which users/potential visitors can read the real-time data and choose to 'interact with the planetoids' and their micro-climates by irrigating them, protecting them from sun, etc. The new bio-cyber-physical environment is expected to facilitate improvement of socio-ecological value for leftover places.

While the D2RP part has already been completed (Fig. 54), the D2RO is still a work in progress. The computer design involved an approach based on Voronoi, that allowed for the creation of surface tectonics as well as the interior structure, which hosts a protected environment for seed balls that succeed into plants. The tunnels and chambers create opportunities for animal and plant species to dwell and develop.

Depending on the location, the surface tectonics are designed to create 'craters' and 'volcanos' that catch or repel climate conditions such as sun and rain. Through the porosity and potential decay over time, the 'planetoid' hosts opportunities for vegetation, insects and small animals to thrive. It consists of components that may be formed of different types of organic material, diversifying the opportunities for various species, which are assembled together in a 'puzzle planetoid'.

The first prototype was made to explore the form, shape and robotic production. The work still needs experiments to be carried out to learn how the design behaves over time. The way in which the shape and material contribute to a particular pathway of decay must be studied in a second iteration of the work.

By placing the work in a typical residual space, we can discuss the meaning of the object and its potential to convey the incentive. First, the work is a minimal intervention, as it conveys its meaning through the processes that unfold afterwards. The planetoid means to empower spontaneous processes by reserving room for them.

Through its form, these processes are less easily perceived, as it is not yet finished. By means of experimentation with form, this project showcases the potential of minimal interventions to stimulate both biodiversity and social accessibility of leftover spaces. The expectation is that the first prototyped 'planetoid' will establish new habitats for various animal and plant species based on studies of the micro-climates prevalent in the respective leftover space.

It will support the life that already exists at the location and will also initiate new life. The development over time will be monitored and recorded on the 'bio-cyber-physical planetoid'

app and results will be published in due course. The main consideration is that by inviting potential visitors to irrigate the 'planetoids' or protect them from the sun, etc. a bio-cyber-physical feedback loop is established, which is expected to improve biodiversity and social accessibility of leftover spaces.

The project was exhibited at the Dutch Design Week 2020⁷⁶. I gratefully thank the team, which included Henriette Bier, Arwin Hidding and Max Latour. The prototype is ongoing, still in development. The outlook is that this project will develop further as a way to create more empathy and compassion for the invisible in the public sphere. I aim to go further in both academia and design engineering practice with the combination of artistic research, advanced prototyping and ethics of technology.

8.8 A CYBORG PLANET MANIFESTO

As I have been speaking before about the ambiguous, the terrain vague and wildscapes, stalking (chapter 3: scattered) I focussed on the way places of otherness create a new sensation and acceptance of the non-understood. Noting compassion towards the ambiguous we can look into Donna Haraway's Cyborg Manifesto. She stated a place for the cyborg: evolution blurred the lines between human and animal, 20th century machinery has blurred the lines between natural and artificial, micro-electronics and the political invisibility of 'cyborgs' have confused the lines of physicality (Haraway, 1985).

This draws attention to the ambiguous in-between- the same story can be said about the way we look at pristine nature and polluted nature, new buildings and abandoned buildings, places with and without meaning. Then, we can relate to not only the problem of the dualisms, but also the discovery of the 'hyper'. As visited before, global warming and ecosystem collapse forces humankind to look beyond anthropocentric perception since we are challenged to consider how different cultures, species and (man-made) objects dwell and become on the planet (Lovelock, 1995; Latour 2008; Morton 2010).

The concept of 'Nature' is, per se, an artificial one. By accepting to create the opportunity for life to unfold. Those dilemmas are typical for participation in the ongoing discussion to define the role for design in the Anthropocene. We suggest that design could focus on creating opportunities for the unexpected to unfold in collaboration with other processes of life (Deleuze, 1968).

I call this incentive 'intentions for the unintentional'. Design can empower ongoing spontaneous processes; visualizing human and non-human processes to be accessed and experienced by humans as well as providing opportunities for new collaborations. Design in the Anthropocene will benefit from creating empathy for otherness, loving our monsters, unfamiliar processes and the complex unknown, since they prepare for an open attitude of constant change and inter-digestion. To set this in motion, design and technology therefore need to focus on the perception of future realities and concurrent multiplicity.

76 *Dutch Design Week* is the largest annual design event in Northern Europe and presents work and concepts from more than 2,600 designers to more than 355,000 visitors from home and abroad. The event is about Dutch design, hosted in Eindhoven, Netherlands.

8.9 INTERVENTIONS FOR THE UNINTENTIONAL

Design lies at the heart of creating new relationships between the ongoing processes in the landscape. Projects can facilitate perception, population, dwelling, interaction and knowledge exchange between different entities. Interventions for the unintentional point out different flavors of realities. In their design, they contain the opportunity for this framing or indexing to be retold by the emerging processes. They are a living language, an archive, telling a different story at any moment in time.

Because the interventions are, with their design intentions, receptive to the world they are placed in, they immediately start to take root and become contextual. They are a representation of the becoming of a territory but at the same time enable it, empower it. We can summarize the meaning of the project and production of design in relation to the Anthropocene. Actions in the Anthropocene try to challenge our perception of reality, the multiplicity of perspectives, time, the natural and the future. We can formulate the following points for minimal interventions in the Anthropocene. They:

- Create new opportunities for life to emerge and repopulate space;
- Represent and reconnect the existence of other realities;
- Witness unexpected change over time as an integral part of their intention;
- Draw attention to detail and perception of other parts / scales in the landscape;
- Are situated in overlapping territories of human and non-human dwelling.

8.10 TOWARDS AGENCY

After considering why and what, we can challenge ourselves to think about the possible how. The next step is to go from generic ideas to specific, practical objectives. How can the above be realized? Because they will always be mere translations of values, it has to be said that the following proposals are just strategies that can be replaced as long as they succeed in reaching the same agency.

- New life can populate and dwell if multiple scales of porosity and entropy are kept in the design.
- The design allows the visitor to perceive greater parts through the indexing of processes;
- Other realities can be accessed by creating art and design that taps into the human condition (Arendt, 1958) as well as otherness (Haraway, 1985).
- It is aware of the dimension of time in such way that the design becomes a vehicle of change, not a monument of separateness.
- Design includes, as a human attempt to entangle life, representations and links to different perceptions of the landscape, expressed in meaning, material, dwelling and life.
- Strategically, design should empower the places that host particular locations where there is a difference of population.
- The aspect of interaction between different 'realities' should be emphasized by the intervention.

8.11 PROJECT AIMS VS REALITY

Projects often turn out differently from the way they were planned. What are the most significant differences between the proposed project and the reality?

The conflict that arises here is indeed the difficulty of time and the unexpected. My wish for this project was to be able to make an interface that would make it possible to capture change and a multi-species aesthetic.

With every prototype, there is a desire to be further along in the process: it is almost the meaning of the word. The aim was to really create an immersive experience of the otherness of nature. At least in this work we have thought about why.

CONCLUSION: INTO ANTHROPOCENE FICTION

A plea for imagining new worlds

As we can see in the examples, the design projects helped to tell stories. Stories about the site, a possible future and about working together. Design is contextual. Design is telling stories together. By speculating about fictions, we can challenge concepts, imagine other modes of living and enable each other to entangle our not-so-individual stories. By using ratio, distinguishing this from that, analysis can create walls. Fiction might then be the most democratic approach, as it makes us equal when looking to the future. Anthropocene fiction in particular invites us to speculate together with others, with processes and unexpected unfolding. The challenge is to include others in Anthropocene fiction. With others, we should consider all these emerging energies.

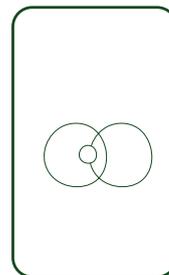
With this 'messy laboratory' we tried to touch on other viewpoints by using design as a way to study and reflect. More than being innovative in themselves, the actions are instruments for creating new relationships, questioning futures and reading places. We need art and design to help us witness hidden talents within the site or context.

Narrative contains the power to invite the other to interweave their own story. Words, concepts, thoughts are there just as a helping hand, a guide for collaboration. Talking about design ideas together is a play of words, images, drawings. The design process is about telling a story together. First, a problem is found, then solutions are proposed. They are not conclusive, but help to sharpen the idea of the problem – often not a technological problem, but one of imagination and anticipation. Together, the realms of idea and speculation help build an environment of confabulation, an environment where stories are told with others, and the world is made with others. A project or prototype then becomes able to communicate itself autonomously and thus starts to have a voice of its own.

These projects exemplify attitudes towards the unintentional and give us insight as to how design can play a role in mediating the multi-species collaborative song of 'becoming together' in the Anthropocene. Hypothetically, I think that 'becoming together' benefits from creating empathy for otherness, loving our monsters, unfamiliar processes and the complex unknown, as they prepare for an open attitude of constant change and inter-digestion. To set this in motion, design and technology therefore need to focus on the perception of future realities and concurrent multiplicity.

They can be the instrument for a democratic song of Anthropocene fiction. Design

interventions are therefore particularly meaningful when they either impact the way people think of and experience change as a source of wellbeing, or when they influence processes to exceed previously regimented expectations. The most effective would be for both to happen simultaneously. Interaction with processes that happen beyond our control might make us more aware, humble and careful, and more receptive to becoming together, **into Anthropocene fiction.**



CONTAMINATE

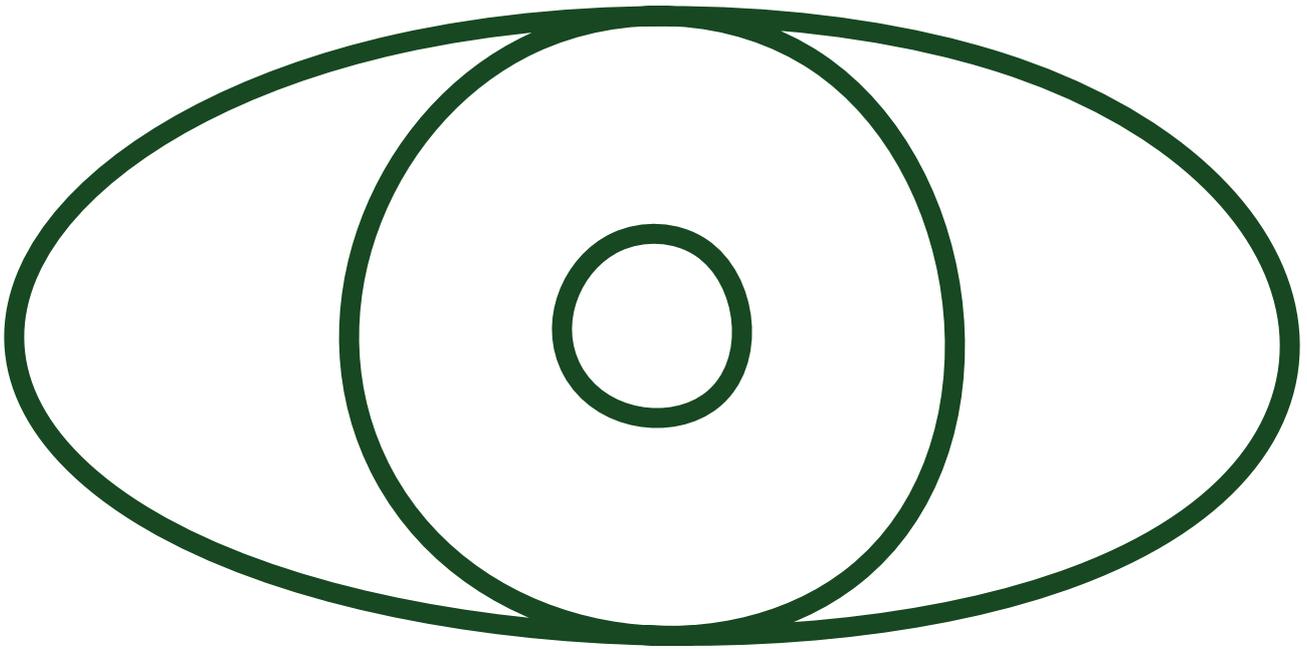
translate
into shape,
values can be
materialized and
speak to other
languages and
realities

everything is
a prototype;
allow the
thing and its
surroundings to
flow into each
other

allow
the thought
to live without
the thinker, give
it autonomy
but not
abandonment

make
decisions for
experimentation,
imagine
assemblages of
future realities

be influenced
by reactions,
place yourself
in concurrent
multiplicity



verinnerlijking
internalizacao
digest

1 babies take longer to digest formula milk: break down, dissolve, assimilate, absorb, take in, take up.

2 they take ages to digest even simple facts: assimilate, absorb, take in, understand, comprehend, grasp, master, learn, familiarize oneself with; consider, think about, contemplate, mull over, chew over, weigh up, reflect on, ponder, meditate on, study; informal get, get the hang of, pick up, get clued up about, get the point of.

3 the source material needs to be digested: classify, catalog, tabulate, codify, arrange, order, dispose, systematize, methodize; condense, compress, compact, telescope, summarize, precis, abstract; rare epitomize.

noun

(Waite, 2009).

Creators, makers, designers have a more open view on this – for a long time they have understood the role of experimentation and uncertainty. The interesting part is thinking about how bigger organizations could learn from this perspective. For example, large organizations such as the IMF⁷⁷ are expanding towards an understanding that goes beyond what can be measured, particularly after the recent developments concerning COVID-19.

Through the trajectory of this PhD, I have explored many paths, taking detours and finding dead-ends: the shape of a labyrinth. Now I have arrived here, with this manuscript. A story about the journey through the labyrinth. Sitting in the tower, overlooking everything at the end of the maze, we can ask: why this path? This path says more about the position taken: why these particular approaches towards decision making? How was it informed and what did I hope to find in the end?

This discursive path of constant experimentation, play, questioning, inventive analysis and intuitive guidance revealed the importance of embracing doubt and making mistakes. Looking back, it is easy to complain about my shortcomings: procrastination, being disorganized, insecure or obstructed by various external factors. The times of silence, distraction, hiding and escaping were needed for me to complete this manuscript.

This path was the necessary wandering through the labyrinth where I learned not only from reading and thinking but by feeling and doing as well. Without a clear road map or a prescribed direction, this experimental journey has taught

me wisdom, skill, perseverance and adaptability. Most of all, this approach reveals the value of the limitations of the study, which I explore later in this chapter.

Carrying out grounded theory research with elements of research ‘through design’ is at the core of this PhD. At the start, I made explorations with small interventions as experiments. Only after starting to think about those projects was I concerned with finding a context, a ‘why,’ a theme, more than a ‘how’ and a ‘what.’ The multiple ‘whats’ and ‘hows’ might help to explore the. The ‘how’ also created links and hints for pursuing the next ‘how’ and ‘what.’

Being too concerned with the ‘why’ can be a pacifier – it occurred to me – and doing helped create feedback, to banish the idea from my mind and help me to reflect and study its context. During visits to interpret places and meet different people, I made design projections. I found that I did not even need to build most of these projections: it was not their results or impact that would be needed to prove the work, it was more about how these projects would create possibilities for different scenarios to develop. This is design thinking.

9.2 ASSEMBLING THE MOSAICS

Faced with the weird, complex, undesired, vague, monstrous, ambiguous and hyper that come with the term Anthropocene, many questions arise. What can we do as designers concerned with space? I learned several aspects from this journey that may inform design agency in the Anthropocene. They involve honesty, exploration, optimism, doubt and respect. It may come to the point where it entails a general decency towards the value of life. In this section I describe those values for each of the previous mosaics.

We can look back at the play between Dionysus and Apollo. A play between implicit and

77 *IMF. International Monetary Fund.* In recent years, even economic institutes seem to adapt their strategies, acknowledging situations can not be controlled. With more confidence, risks are taken while the return of investment can not be secured.

explicit; intuition and rationale; divergence and convergence. For many parts of the design process, it is useful not to be too conscious of choices when they are made: to do and look back on it afterwards. Looking back at the mosaics gives us new insight about the arguments made. They inform us about the purpose of each chapter. Here, we 'inter-digest' them to gain an overall picture.

1 unfolding together

Keywords from Chapter 1 Entangled: subjective meaning, wholeness from urgency, interwovenness, unlearning

The research process is non-linear and not sequential. Deliberate and unconscious, explicit and implicit are concepts that happen simultaneously. It is not a matter of concept or research before doing. It is research through doing, being sensitive to what is happening in the now and connecting different elements found all around. It is important here to embrace your individual positioning, the contextuality. Problem and solution co-evolve. Design is suited to experimentation with the tension found in between. The context is always interpreted from the past. The actions taken depend on the attitude towards problem and solution. Action, reflection, problem and solution are interdependent and unfold together, like the petals of a blooming rose.

This chapter is a plea for a non-hierarchical approach to problems. It suggests doing this by an appreciation of divergence: by tapping into many perspectives simultaneously while staying hopeful, a path will be found. The utility or result does not have to be clear from the start. *(Design) actions may focus on absorbing complexity with honesty rather than with confidence.*

2 responding beyond control

Keywords from Chapter 2 Submerged: approaching complexity, designer's voice, Anthropocene, activism, wicked problems,

attitude

When the purpose is not clear, how should we behave? Responding to biodiversity collapse, climate change, recession or COVID-19 always comes with uncertainty. The challenge is to act without knowing the outcomes, daring to dive into the unknown, taking risks.

This chapter is a plea for experimentation and comfort with failure. It suggests doing this by embracing subjectivity and seeing value in our own voice and journey of exploration. In this way, we can go where we haven't been before. *(Design) actions may focus on different ways and paths to explore and speak rather than to eliminate failure.*

3 loving our monsters

Keywords from Chapter 3 Scattered: imperfection, entropy, emergence, overlooked qualities, new wilderness

By understanding the way we have been affecting the world, we can see more value in the garbage, like parts of ourselves we do not want to see. Parts we have abandoned, disassociated from ourselves. By embracing 'monsters' as part of ourselves again, we can expand our understanding armed with new desires and responsibility, rewrite our values, helping find new qualities in every character. Mistakes do not inform our shortcomings, but our opportunities.

This chapter is a plea for seeing value in the imperfect, undetermined and decaying. It suggests doing this by accepting our own shortcomings, so that design does not have to transform space into a desirable reflection of ourselves. *(Design) actions may focus on the opportunities for wellbeing that can be found in previously perceived shortcomings, rather than hiding (from) them.*

4 obligation to disobey

Keywords from Chapter 4 Wandered: becoming, unlearning, disobedience, embodied experience,

latent qualities

Transforming sites is a rewriting, but not necessarily with an attitude of decency towards what was written before or what it is written by itself. Disobedience in writing helps us to think about the emergent character of place, since the values of design become more apparent while searching its limits. To get through the maze, its rules must be broken. This chapter is a plea for disobeying the rules of daily life. It suggests doing this by challenging our pre-existing lines of thought by breaking apart/unlearning routines and logical paths. Conflict can be painful but should not be avoided. *(Design) actions may focus on revealing and doubting existing biases, rather than repeating them.*

5 form follows potential

Keywords from Chapter 5 Emerged: becoming, unlearning, disobedience, embodied experience, latent qualities. From existing design projects, we learn that architectural configuration can facilitate the entanglements of species, time and territories. They can guide a potential for more life, diversity and interaction. Form is there to guard existence and stimulate encounter.

This chapter is a plea for setting intentions for unintentional happenings. It suggests doing this by creating minimal interventions that alter the perception and possibility of this complexity. *(Design) actions may focus on creating environments that can develop and balance themselves, rather than being dependent on a single actor. Form may provide a guard, guidance and legibility of the potential of the spontaneous at the site. This form has to have different levels of porosity, scale relations, absorption and entropy or timespans. (Design) actions then may focus on the possibility for processes and actors to witness, respect and connect. This can be done through frames, gradients, contrasts, translation and confrontation.*

6 into anthropocene fiction

Keywords from Chapter 6 Contaminated: experiment, messy laboratory, drawing together, being influenced

Projects can encourage possible futures to arise. The projects are not fulfilling in themselves, but they can communicate intentions for the unintentional. This chapter is a plea for imagining uncertain and non-Nature civilizations. It suggests doing this by using design and design processes to tell stories beyond civilizational first principles. *(Design) actions can focus on making death, decay, darkness, disaster, wilderness and the unknown a visible part of the human condition and the public sphere. It is important that those stories are honest, relatable and imperfect.*

7 a re-enchantment of decency

The lessons learned from these mosaics inform the need to let go of the obsessive quest for control, giving space to spontaneity and making room for and appreciating the implicit. The six pleas for design agency in the Anthropocene are also life lessons, postures for imagination, entanglement and acceptance. As life lessons, they affect the way we see ourselves, our environment and how we think about form. Why is this useful for design agency in the Anthropocene? In societies focused on individual gain, obsessed with growth and control, there is a need to expand understanding beyond what may be measured: simply growing per se is not sustainable. Change will always occur; it is impossible to remain fully in control. This focus on end result is often regarded as a western, continental concept. Our human lives are short: are we just here to gain power over space and other beings? When we die, did we merely organize, strive for, realize, shape, move and alter the world? We also obeyed, decayed, failed, lost, surrendered, feared, entangled, submerged, contaminated, wandered, forgot, made mistakes, scattered, loved... After we die, does our meaning compost into fertility or is it

indigestible?

This thesis is a plea for an open-ended, uncertain and valuing approach to design actions in the world. We can do this through our internal attitude, but also in the way we relate to and influence the material world. Thinking beyond the need for control makes us sentient beings accepting of the limits of our human condition. It suggests doing this by re-imagining our idea of dwelling in the city, where the concept of 'third nature' is dominant. In this form of living, we are aware of our own construct of Nature and may see it is no longer useful. Nature (which is artificial) does not need to be conquered and familiarized but encompassed and familiarized.

9.3 NOW: WITNESS, CARE, (RE)CONNECT

The concept of design agency beyond control would think about adding the minimum, minimal actions as a strategy. This is in order to map and see, to experience situations as a designer and to frame other realities for visitors. These interventions would index possible new futures, and those futures come together with actions, intentions or hints for creating new conditions for the growth of diversity and life. It is a matter of seeing where to leave things as they are, and where interventions can stimulate, where do we need to create borders for the human territory? It becomes a matter of territory. Can we also find environments that have emerged around care? Care for each other and the spontaneous, the unexpected? Care for the invisible and the impact of our movements in the world.

This balance between letting go and control is a matter of decency. With this decency we can imagine alternative scenarios for making a storyboard that addresses meaning for our lives in the future. Where art is needed, new doorways to alternative perspectives are needed too. Art is not only about doing something,

but also about feeling and understanding. It is also about unexpected results. Especially in challenging times, new, open-ended, implicit-made-explicit design experiments are needed. To create more opportunities for the unintentional, designers can create areas that protect different scales of *unintentionality*.

Because it is about perspective rather than design solutions, minimal interventions should play a role in depicting alternative experiences, as they can influence how the wider context is perceived. We have reflected on different projects, where we look at how they depict an ease with being beyond control (by the designer and for the visitor), how the unintentional brings new experiences to visitors and where we can spot the act of 'minimal intervention.' Landscape architecture and land-art projects can make room for the unintentional, but to make this space comprehensible and accessible, it is still important for this intention to be clear. Through the experiences they provide for visitors, interventions can depict an openness to the unintentional elsewhere, which might change the attitude needed to respond to that which is beyond control. As seen in the experiments in the 'Contaminated' chapter, this can be done through minimal interventions. The strategy behind those projects was to shape possibilities for unknown developments to happen. First, the objects were placed at locations with different types of potential. This meant different conditions such as sunlight, humidity and temperature. But what was most interesting about these projects was that they all helped to show change, entropy, growth and uncertainty.

From the site experiments, we can learn that giving places attention makes it possible to care for them. The challenge is to care for the unexpected to allow it to emerge. Then, caring for a place can create interaction with the wider context, the environment. The challenge of the intervention, then, is how it prepares the visitor to see change as an aesthetic for wellbeing.

Being or acting beyond control is a matter of scale. Makers have been comfortable with being out of control. They are aware that in order to shape new ideas and objects, the path is not linear. The public sphere is also political. Makers, designers, architects and planners create the public sphere – they adapt it and introduce new roads to the future.

Design enters the realm of politics. Politicians continue to be guided by a modernist, or ‘Apollonian,’ approach as they need control, a guarantee of results in the future. But sooner or later they will have to adjust to the uncontrollable events that occur. Before calling it ‘Romantic,’ governments should be concerned with new policies that think about stimulating uncertainty in the public sphere. Society can benefit from creators in the way they are open to experimentation, ready to fail, comfortable with honesty and have the courage to look differently at matters. The most important lesson is that designers and creators need to re-imagine and discuss the meaning of art and technology and the perception of nature.

9.4 BETWEEN UTOPIAS AND NON-UTOPIAS

Fourth nature is that which manages to live despite or because of the human influence on earth. This could be related to capitalism or industrialism. To notice this ambiguous, hidden, forsaken and hidden fourth nature, we must avoid assumptions that the future lies in one single direction ahead.

Instead, I believe the future is one of many possible planes. Multiple futures are in front of us. Each moment makes one possible, and another not. Stories of progress and control have blinded us to this manifold quality. To start to think, feel and act in a world beyond ideologies of linear paths to success, this thesis sketches open-ended assemblages of entangled

ways of living, always contaminated by what is around.

My experiments in form and my argument unfold together, like the petals of a rose. Alongside this assemblage, I add drawings, photos and images. Some are directly connected to the text; others tell a parallel story. They are here to give a sense the multifarious texture of reality.

Projecting the above lessons into the future can provide scenarios that will inform the way we handle and manage our designs in these new contexts. The idea is that the proposed designs express a readiness for the uncertainty of the future, as well as a resilience. In order to break and open up ideas for thinking outside the past, the present and future may unfold with minimal interventions, as they help us speculate with others.

Science fiction may help designers approach wicked problems, as it helps us reflect on the meaning and possible effects of including others in the speculation. Art and design should help to reimagine new ‘worldings,’ re-enchant a perspective for co-existence, where the human condition is not separated from or at war with the concept of Nature. Scenarios for the future are more than utopias or dystopia’s. As described in Fig (57), we can see a mapping of the concept of utopia, dystopia and non-utopia. We can also see how they relate to control and becoming. We might compare non-utopia to Foucault’s heterotopia. These can be guided by disappointment and relief.

In typical modernist thinking, we could generalise that there is a strong sense of the ‘us’ and the ‘other,’ of difference and separation: optimism for utopia and fear of dystopia. If architecture becomes the mediator of control and becoming, construction and decay, the now is achieved mainly by seeing the place as a multiplicity of layers, where there is no ‘us and

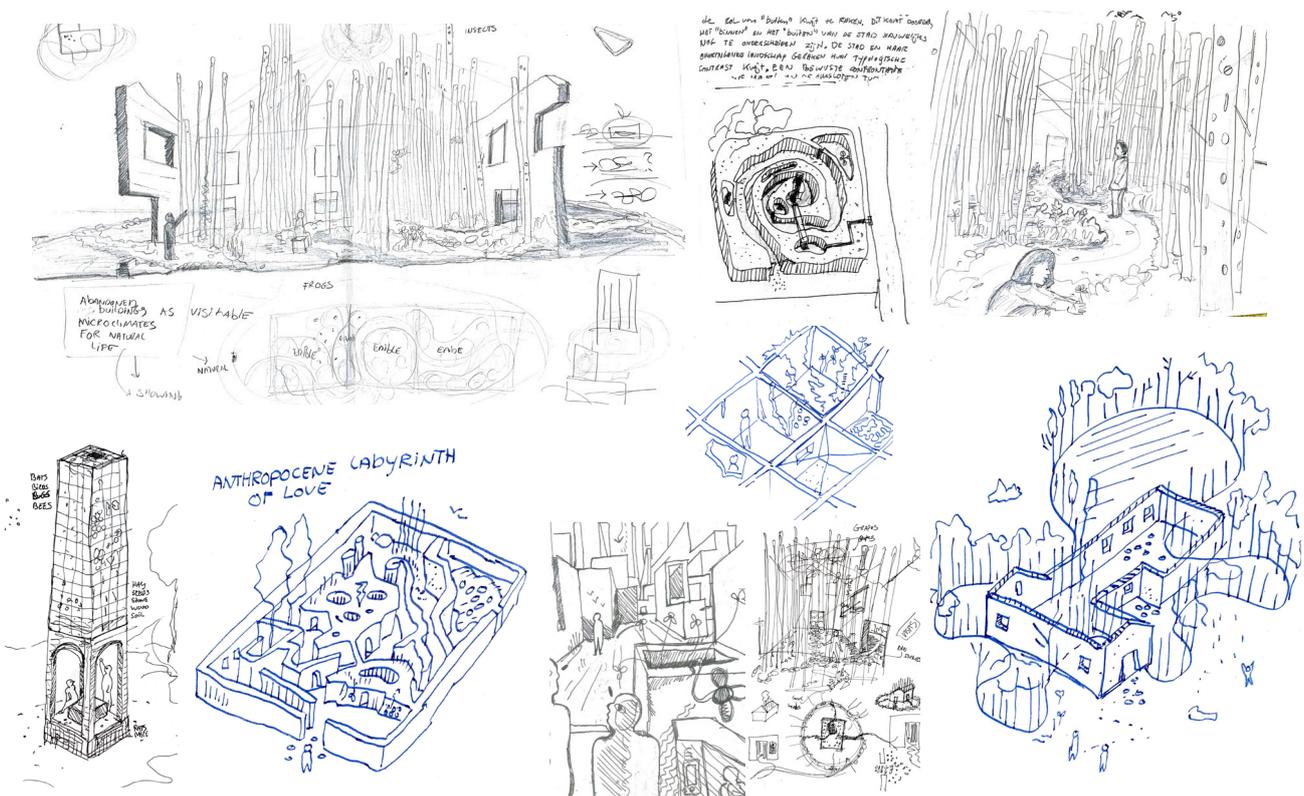


Fig. 56 Imagining new romantic places, places to witness the plurality of becoming, change by making processes and possible futures visible.

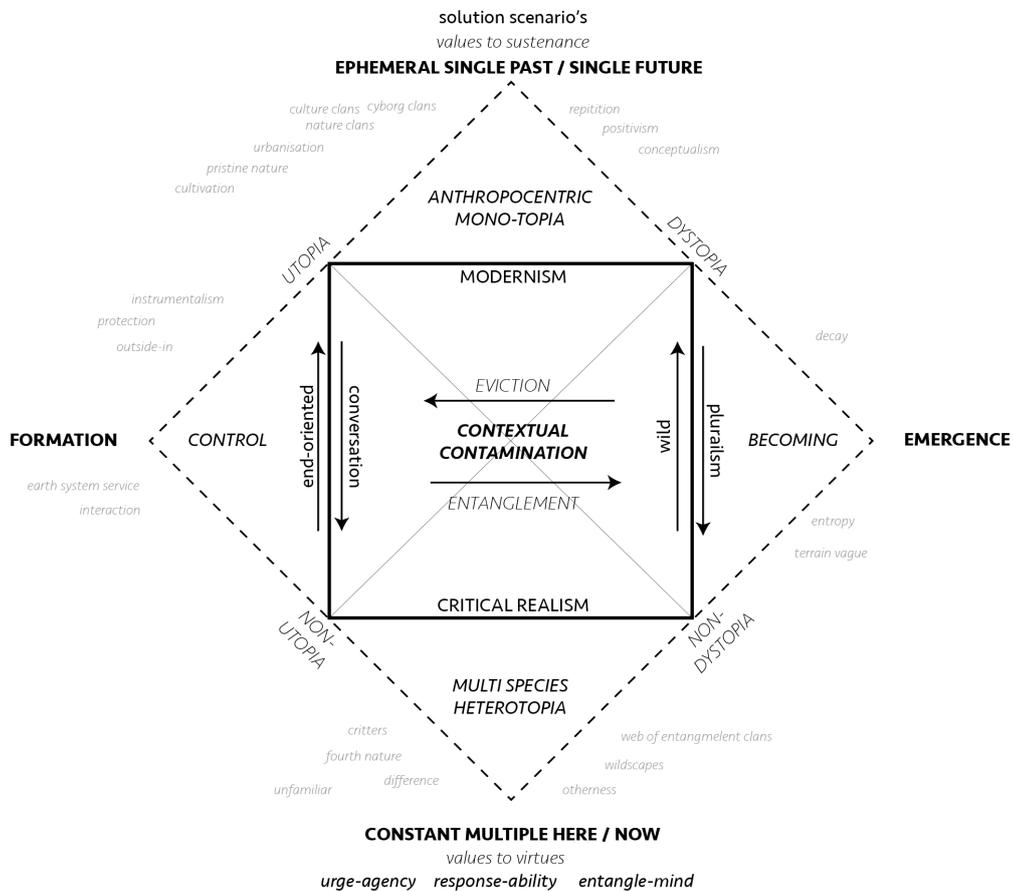


Fig. 57 Kraus' diagram contemplating the plurality of the future.

them,' but everything manifests and relates with everything else at the same time.

The presence of nature is frightening and confrontational to the human condition. To be more at ease with the threat to the human condition, humans gather and build cities. Everything in the city is there to contribute to the construct of Nature. This construct prevents the idea of difference, otherness, unfamiliar or unexpected encounters. This can be related either to climate change or to other aspects of which we would rather not be reminded: decay, death, loss of meaning, insignificance. These frictions are what make humans create architecture and utopias.

Utopia is a word that creates separation between perspectives. A reality where monsters attack us is not our utopia. Maybe for the monsters, this would be part of their utopia. A utopia is moralistic, anthropocentric and does not work for the balanced co-existence of multiple species. In order to facilitate our utopia, we control this world by constructing it with the use of architecture.

The idea, or construct, of dystopia is a place we fear and avoid. Almost as if these perspectives are heaven and hell. The alteration of space is just the embodiment of how we cope with that fear. To think about the future, we need to imagine other forms of coexisting. How can we work in between the projection of ideas on spaces, facilitated by scenarios, in combination with the production of space through the expression of the fear of dystopia? What kind of futures did this research entail? Much of the work is about engaging with a search for harmony and growth in the world.

9.5 IMAGINING NEW 'ROMANTIC' SPACES

'Medieval gardens referred to the biblical Eden, Renaissance gardens to the mythical natural landscapes of the Antiques, English landscape gardens to the ideal Arcadian landscapes of Greece and Italy, mid-century Danish gardens to the agricultural Danish landscape, to name a few. In our contemporary metropolitan landscape the role of landscape has shifted and diminished. The diminishing of the open landscape evokes a sense of loss, of longing, to what was there beforehand thus we suggest the potential of the garden to recover this loss has only gained value.'
(Emmerik & de Wit, 2019)

The garden can be seen as an opportunity, a translation to convey meaning in relation to the landscape. We may see 'the Anthropocene garden' as a place to exercise love, understanding differences more than overcoming them and creating an understanding of what is larger than us, but this time with an awareness of the complications beyond our understanding. The Anthropocene garden hints at realities of hyper objects. The architectural layer can make the landscape explicit through its composition (Bobbink and De Wit, 2006). Can we conceptualize a similar relationship between the Anthropocene and places? The garden should not only inform us about the character of the landscape, but also what attitude towards the landscape it conveys. By doing this, it can make clear the decisions we need to take for our own positioning.

The garden of love is a place of encounter. Difference exists for us to understand, not to overcome. In the garden, we coexist with each other for wellbeing. We let ourselves be contaminated and inter-digest each other's intentions. The garden of the Anthropocene could be seen as a garden of love. A place where

different species celebrate becoming part of the world, like a gift of life. Gardens are normally designed for pleasure, often enclosed by a wall, and a place where people meet, fondle, kiss or enjoy horticulture. The artificial is often a representation of ourselves, preferably smart, kind, charismatic and invincible.

By shaping the world around us, we create a desirable mirror of ourselves. More than nature itself, it is the traces of ourselves that now create uncanny, sublime feelings: the melting of the ice caps, polluted zones, plastic soup, the list goes on. A fourth nature garden is the one where differences between nature, culture and even cyborg break down as their entanglement is made explicit. Could this be a new role of the garden of love?

As Barnett states, the 13th-century scholar Albertus Magnus described those gardens as *'places with no great utility or fruitfulness but designed for pleasure'* (Barnett, 2013). The imaginary garden of love was a 'sublime actualization of divine love.' The potential in this concept nowadays is for our common world to articulate its capacity to become different. To become different is self-determination, created by 'the republic of beings' (Barnett, 2013; Latour, 2008). The project of landscape architecture is to create this republic.

This is a political issue; we need to think about how gardens play a role in the public sphere, as they create the opportunities for new conversations between things, beings and hyper objects. The idea of a garden is that it is an enclosed and bounded area, but despite its enclosure it can be awash with multiplicity. The problem for urban design is connecting ecological systems with a view to developing an ethical encounter. By entangling ecology and sociology, the garden becomes the binocular for implementing values within our living landscapes.

It is hard to see the garden at all: we only see made-up images of ourselves, our reflections, from architecture to screens. We allow the traces we leave behind to make it seem as though we are not guests, but hosts. The garden has the potential to make this message for the landscape explicit. This potential refers to the invisible issues of the literal world but relies on the mythical world: a place of fantasy, of nymphs and gods, death and fertility, intoxication and confrontation.

9.6 THOUGHTS FOR THE 21ST CENTURY

Imagining this new kind of garden of love may increase opportunities for collective agency, planetary stewardship, and the role of designers. What we do with our time should not be determined by revenue and traditional economic growth. In hunter-gatherer groups, it is about dependency on other people. Freedom is limited by this dependency. What if the garden of love was a place for encounter and play, for *'homo ludens'* (Huizinga, 1983)? Capitalism capitalizes bodies, that can be abused. Would an universal basic income increase our autonomy? Would we look more freely at monsters, would we be freer to respond beyond control, to wander, to disobey?

As Lewis and Maslin suggest, work and consumption do not have to be linked. With a basic income, we can still find our needs with work and consume less: consumption doesn't have to be seen as a compensation for 'work'. And with not-consuming as feasible option, there is no obligation to destroy the world. The same can be said for approaching land and place. Can we 'not-consume' places but instead meet them? We need a different attitude: not being a visitor, but part of: to be part of, to belong to, to care for. It is an opportunity to unleash and experiment with creativity.

As a thought experiment, we can look at Wilson's Half Earth. He proposes allocating space for the things we cannot control. The other half should be places that we need. It is clear that half of the earth cannot be zoned off. This will mean becoming entangled. Which brings us back to Haraway's story, mentioned earlier. A transformation of the food system is required. Cheapness should not be the core of the food industry. Or of anything, for that matter. We do not have the necessary knowledge to replicate the world for our long-term benefit. It is just one experiment we have, as Wilson said (Wilson, 2016). Radical changes in society tend to change our view on nature, aesthetics and our relationship with the natural world. In the west, our ideas have been forged in sponge to rationalism and the industrial revolution. Clean nature is juxtaposed with industrialized, dirty land, as described in the Romantic movement (Lewis & Maslin, 2018).

The Anthropocene and our recognition that human kind acts as geological force, coupled with the rediscovery of our lack of separation from nature, leads us towards a new aesthetic based around rewilding. This is the idea that large areas should be left for nature to return and develop on its own.

In research on Rewilding we find many examples (Jepson, 2018). It is not time travel, but a way to create greater biodiversity. Rewilding is stewarded. Nevertheless, the more diverse it is, the more resilient it is to environmental changes. Blending half earth and rewilding together to promote the world. The question is which policies need public debate: can this be done in the public realm? Growth does not have to be confused with expansion. Instead, growth has roots that entangle with other roots in the ecosystem, weaving together, interplaying. Shrinkage, which is usually perceived as a territorial problem, can be approached with a new paradigm. Shrinkage may be perceived as part of the transformation towards

nature-culture. Shrinkage may need to happen for the transition to other programmes used in a specific landscape.

This is where we come back to art and design. I believe that design of the public realm is one important factor to change the world. Designers can promote these new aspects by creating experiences that rewild and on the other hand make people more at ease with things outside their control. How can 10 billion people and the world live in a state of wellbeing in the Anthropocene? How can we move towards equality within cultures and countries and with each other? We need to loosen hierarchy, break with order, design beyond control. We cannot know the future of the world. What we do know is that the future of the only place in the universe where life is known to exist is becoming increasingly determined by our actions. We have become a force of nature. We are different, because we reflect. The key task in the early 21st century is to use this power and capacity for reflection to maintain the planet as a place to live comfortably, to minimize suffering and the loss of species (Lewis & Maslin, 2018).

We need to acknowledge the danger, then take action. This action however is not in the hand of human kind, but a collaborative work. Besides all the work done that is within human capacity, we need a strategy for working with what isn't.

CONCLUSION: A RE-ENCHANTMENT OF DECENCY

A plea for re-enchanting multiple futures

Landscape architecture as a discipline is more than capable of peeking beyond the visible realm. It is engaged with large time frames and scales, ecology and geological processes. It is therefore a discipline where there can be appreciation for the unknown, the other and the hyper. It does not only appreciate, but also works with the alteration of space through

architecture. It has the tools to influence those invisible worlds, or even make them visible. When facing complex issues that cannot be solved immediately, landscape architects can create frameworks that allow processes to develop further, while they are acknowledged by their neighboring actors.

Art and design can work as a doorway to expanding perceptions of place. In this concluding chapter, the aims and objectives of the previous mosaics are revisited and their outcomes described. The intention of these formulations is to help designers to approach alternative realities and futures while being challenged by the unexpected realities brought up by the Anthropocene. Design agency in the Anthropocene should fully embrace uncertainty.

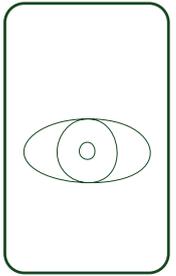
Designers should seek to make designs that indicate encounters and potentials for diversity in the place. For this, I argue that designers need decency to perceive aspects they claim not to fully understand. The decency not to overrule the other with their convictions, but to dance together, instead of making war. As in the 19th C, when it was more common for researchers to switch between disciplines, studying and writing about philosophy, then geophysics, then biology.

When carrying out an intervention, the reality and imagination of the particular designer is placed into the world. Their position towards the specific place has an impact on how future stories unfold there. The following describes the outcomes of the mosaics, reformulated so as to be useful and maybe strategic for others in a time of complex urgency.

It is the unfolding of the 'whole story' that completes the design of the minimal intervention. As discussed, the cellularity of life is the result of indigestion, not sex. To digest each other means to become part of each other's process, to become one. Being each other's process means entanglement. Becoming

in its purest form. The challenge for design in the Anthropocene is to get acquainted with processes of becoming, and inviting others to actively, reflectively participate. (Design) actions can focus on creating environments where the presence of non-human autonomy is witnessed in order to respectfully (re)connect. To balance and change our mindsets, our living environments need more opportunities for appreciating the uncontrolled.

A re-enchantment of decency is an animistic approach with pragmatic logic that sees the wellbeing of humans, animals and environments as deeply connected. Human interventions would preferably set out to enable autonomous 'sympoietic' stewardship of the planet by including intentions for the unintentional.



DIGEST

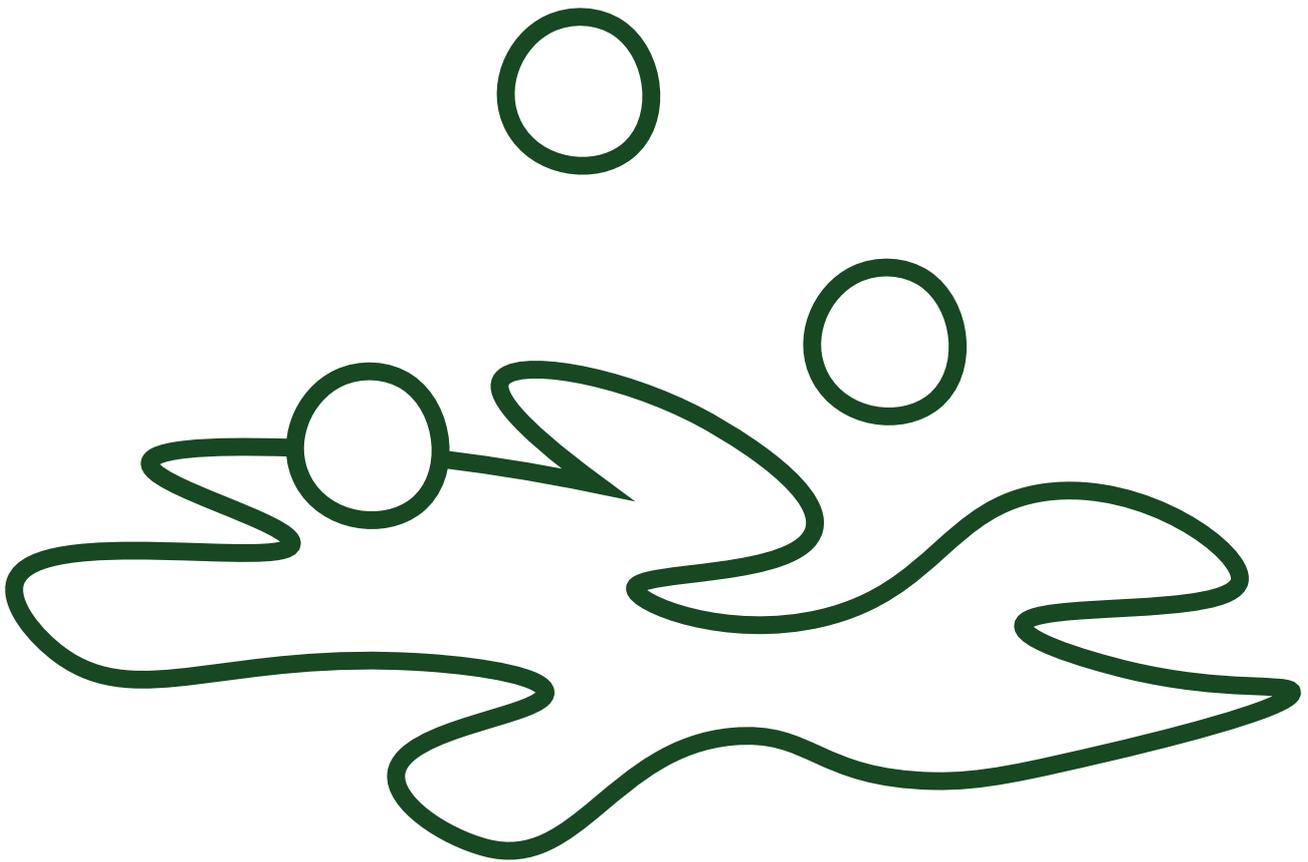
make a work
about the work.
what is 'integral'
to your traces?

reflect at
what decisions
have been made;
what values do
they represent?

what can it do
for the future,?
what does it set
in motion?

over-arch
the smaller
stories, find
the common
deviation

accept that you
will always swim
in unknown
depths



*bezinksel
sedimento
condensed*

1 a condensed version of the book: abridged, shortened, cut, cut-down, concise, contracted, compressed, abbreviated, reduced, truncated; summarized, summary, abstracted, precised, synoptic, synopsised, outline, bare-bones, thumbnail; informal potted, slimmed down.

*2 condensed soup | condensed milk: concentrated, evaporated, thick, thickened, reduced; undiluted.
ANTONYMS diluted*

(Waite, 2009).

the speed of light, we will never reach and understand the totality of perspectives to describe a holistic view.

Although I believe a singular objective truth exists, our idea of that truth will always be mistaken. Any approach towards a holistic view is subjective. This is not an issue that should be eliminated, but a challenge and opportunity for us to keep questioning our world-view. We are informed by what we find in the context. For multi-species collaborative living, we should be conscious of unlearning and becoming with the undesired, invisible, chaotic or even untameable aspects of our encounters.

In the 2nd part of this thesis, 'poiesis' (mosaics 4-5), people (practitioners and academics), (abandoned) places and transformation projects were visited. The dialogues provided insight into how others conceptualize, approach, design with and learn from uncertainty and the unfamiliar. (Spatial) designers and artists can create frameworks that work as common grounds between familiar and unfamiliar territories. Those frames can provide experiences that make chaos, change and uncertainty more approachable for humans, while giving opportunities for complex ecosystems to thrive. This, in one way, provides more accessibility and understanding of the multiple perspectives shown in part one, and, in another way, makes more room for new existence to emerge (improving biodiversity). The important thing is that these frames are not necessarily ordered but can be messy, temporary and ever-changing. 'Messy frames' suggest an approach to a changing understanding of a space.

In the 3rd part of this thesis, 'praxis' (mosaics 6-7), the projects of others were discussed and experiments were carried out. These experiments provided interactive experience with the context. The action of doing or placing the experiment and monitoring how it alters perspective and environment simultaneously is

a way to analyse and learn from the location. For that, it is important not to look through one lens only, but to be open to unexpected encounters. The three projects regarding minimal interventions demonstrate how context and encounter alter the idea and meaning of a project along the way, a matter of telling new stories 'together.' In order to invite others to contribute to these stories, we can think of and imagine intentions for the unintentional. These intentions can be the expression of values and relationships. Design is there to facilitate the opportunity for those values and relationships to take place. Those projects are not an outcome of the search for values, but a way to reflect during the process.

As discussed in the 4th part, 'síntese' (mosaics 8 and 9) 'Design agency in the Anthropocene' can be described as an agency where the maker is aware that they will never understand the complex totality, and tries not to diminish that fact. Instead, it is seen as an opportunity, a challenge and an advantage. The designer's cause is not to clarify this reality per se, but to provide new opportunities for healthy and happy co-existence. This comes from the perspective of the world as a collaboration of life. Designers can facilitate those opportunities by creating common ground in which new relationships can emerge. Practically, this results in including emptiness as part of the design.

This thesis contributes to improving understanding, in this case for design research, with this open character and the process of the designer's positioning. This is done through a mixed use of methodologies related to design research. Openness and intuition play an important role in relating to aspects that are beyond understanding and beyond control.

10.2 KEY POINTS OF THE WORK

When responding to complex, urgent matters such as the Anthropocene, practitioners should use their intuitive design skills and informed subjectivity as a way to research and position themselves, because it is a useful alternative approach in which the importance of subjective experience and prior knowledge is recognized.

The practitioner-researcher, or reflective designer, should first take a step back from projecting their initial ideas to respond to and experiment with interaction with the subject and allow room for their skill to combine many aspects that are intuitively beyond control. This can be done by diving into the complexity. This is to prevent 'pre-programmed' ideas from dominating decision-making and helps redefine the question. Based on reflection on my journey, this thesis has suggested that the embedding of research as design process is a suitable approach for practicing and researching designers and architects facing the Anthropocene.

In general, design agency in the Anthropocene should be concerned with empowering qualities and spontaneous processes, preventing energy sinks. Inquiry and analysis are a matter of context and the designer's subjectivity. Emphasizing existing qualities and facilitating potential ways for collaborative living with the most minimal intervention possible is the most sustainable approach, as it builds on existing processes and allows new relationships and futures to emerge spontaneously by themselves.

This thesis suggests that this can be done by accepting, emphasizing and giving voice, access and visibility to what is beyond control. Designers could design (messy) frames where the visitor can experience the fringes of other realities that at the same time create a possible unfolding of those other realities.

How can we define design agency in the Anthropocene? I suggest imagining the Anthropocene as an open-ended process, in order to respond to its complexity. I also suggest that design and technology in the Anthropocene empower spontaneous processes of change and articulate them by making them perceivable. With this approach, the problems of perception, uncertainty and response-ability come to light in order that they can be explored through interdisciplinary practices.

This contribution is based on participation in the ongoing discussion about defining design's role in the Anthropocene. I suggest that design should focus on process and framing intentions for the unintentional through interventions for the unintentional. Design can empower ongoing spontaneous processes; visualizing human and non-human processes to be accessed and experienced by humans, as well as providing new connections between existing processes for collaborations. Makers respond to overwhelming complexity by stimulating novel balances for wellbeing in possible futures. Attitudes and interventions convey this position and simultaneously make it accessible for visitors to experience.

My proposal is to further explore the attitude and potential of land-art, eco-art, bio-design and landscape projects, attitudes and methodologies that underlie our perception of their processes. This is because projects exemplify attitudes towards the unintentional and give us insight into the way design can play a role in mediating the multi-species collaborative song of becoming together in the Anthropocene. A set of values and design proposals that fit intentions for the unintentional is outlined in the 7th mosaic 'Contaminated'. Looking back at the work as a whole, I think that design agency in the Anthropocene will mostly benefit from creating empathy for otherness, loving our monsters, unfamiliar processes and the complex unknown,

as these aspects prepare us for an open attitude of constant change and inter-digestion. To set this in motion, design and technology therefore need to focus on the perception of future realities and concurrent multiplicity.

10.3 OUTPUTS & OUTCOMES

Outputs are physical or measurable results, often directly visible, and can be seen as a product. They can be shown through workshops, design, numbers of papers etc. Outcomes are results that are not immediately visible but can be derived from the outputs. It depends how the outputs are approached. In this PhD project, the outputs are the new links between the different mindsets, projects and reflections. The way these new links were synthesized resulted in attitudes that can be counted as outcomes.

outputs

1 thesis, 1 grounded theory mapping, 4 posters presented, 80+ abandoned sites visited, 20+ landscape architecture projects visited, 5 sites broken into, 100+ designs observed from images, 2000+ photographs, 20+ European cities visited, 12 guided visits to abandoned places, 1 travel guide, 7 public talks, 4 published papers, 8 conferences, 9 rolls of sketching paper used, 100+ talks with my supervisors, 15 conceptual projects, 35 hidden spheres in Rotterdam, 5 growing spheres, 1 3D printed wildscaper sphere, 1 exhibition at Dutch Design Week, 30 + additional books in my home library, 10 interviews, 1 interview for publication, 90,000+ words, 9 sketch books

open outcomes

- an open attitude towards failure
- a more articulated voice as a thinker / maker
- better understanding of the process of doing a PhD

- better understanding of inductive research
- better understanding of the advantage of doubt

To respond to / redefine the Anthropocene, makers need to philosophize, as they have to reconsider how their ideas influence their actions; Design should create opportunities for the unexpected, thereby creating room for the chaotic aspect of nature in our midst and the story of the human condition; Makers can create projects that might make visitors more comfortable with the parts that are beyond their control; Travel and site visits should be an opportunity to explore what appears never to have been seen before

10.4 INTENTIONS FOR THE UNINTENTIONAL

Consequences of typical Apollonian planning are strict programming and avoiding uncertainty. Closed systems give an idea of fixedness in time, security and control. The perfect fit means less resilience and adaptability. This way of building is a colonization of the architecture institute and often oversees witnessing complexity, floating attention, projecting articulation and characterizing minimal intervention.

A core finding of the research was the urgency to apply design for the unexpected. From form follows function to: form follows potential. Nassauer proposes: "messy ecosystems, orderly frames". She and Braae (2016) indicate that by, for example, making clear straight lines around the chaotic, the contrast with the unclear becomes accessible to humans. Less anthropocentric, we could say that the ecological is on the contrary 'orderly' (compoiesic). The converse "compoiesic ecosystems, messy frames" would mean that the frames are dynamic and do not form a clear boundary. In this case an openness to the changing and emergent of frameworks. An intervention that attempts to bring out

the complexity and offers the unexpected, emerging, a place to land, facilitates change, interweaving, alienation and exploration. In this sense, 'unintentional' focuses on the unintentional effect of the person who intentionally sets up the intervention. The response to this can indeed be intentional—from a human to any animal. An intervention would therefore not be shaped by the specific function it will fulfill, but by the potential for multiple futures that it can give the place.

10.5 THE MINIMAL INTERVENTION

An artifact or action that indicates the complexity of a place, instead of obliterating, rewriting or forcing it, we call here a minimum intervention. The term is derived from the work of landscape architect and artist Bernard Lassus. He called wandering with a 'floating attention' the basis for the 'inventive analysis' to approach the complexity of a place. The minimal intervention is about pointing out this stratification. As Lassus says, a minimal intervention can give a notion to a place: "how interventions produce transformation in the landscape experience" (Robert B. Riley in: Lassus, 1998, p.9). The minimal intervention is an inverted framing. In an example, Lassus talks about how a paper strip in a red tulip shows a gradient: the deeper in the tulip, the redder. This simple intervention shows a new perspective on the complex truth. It is therefore possible that these interventions point out to visitors the presence of other species, processes and scales that are not necessarily visible in the first instance. The minimal intervention could be a way to reveal the changeable and complex: for example environmental aspects such as shifts in biodiversity and climate change.

There are many sites that have lost their use, often industrial places, and have now been transformed for the benefit of people. The places that are being transformed are just the tip of the iceberg of the places that are there. The alternative of transforming is to stimulate, rather a helping hand to point out or 'dramatize' the ecology of truths. Dramatizing

has interfaces with land art and eco art. After all, land art also brings attention to a broader perspective and thus shows processes that play in a space. Eco-art works on the meaning of aesthetics in relation to larger ecosystems (Weintraub). If something is made in space, and the maker wants to relate to spatial and complex systems, they could integrate land art and eco art into their practice, instead of seeing them as separate activities.

In addition to indicating depth, the interventions could also stimulate the continuation of the stratification. In addition to passively exposing stratification, it could also play an active role in self-organizing the truths that take place there. A minimal intervention could therefore address several truths simultaneously without this having been the intention of the maker. It was therefore decided not to make room for specific animal and plant species, but to look for a general strategy to accommodate diversity.

The author himself has little knowledge of specific species and organisms. It's about making principles that make conditions possible for organizing places yourself. Design choices are not made on the basis of the analysis of a place, of human experiences, criteria or variables - the intention is that no choices are actually made - but that the interpretation of the place is enough for diversity to arise. Living in the place has its own responsibility to go here yourself. How can a minimal intervention demonstrate and stimulate complex truth? Based on the observations made during the trip, it was found how people can engage in the use of the minimal intervention in complex situations.

- do not approach the development of the location as a linear process through time but as a singing of truths
- recognize that the complexity of a location can never be fully understood
- see value in the unknown and emerging - holes and emptiness are opportunities for

complex systems

- adapting the rules to the situation instead of the situation to the rules
- learn from languages outside the written language

10.6 DESIGN PRINCIPLES

How do you mold the thoughts into form? The characteristics of the minimal intervention can be described with the following six principles: porosity, (micro)climate, flow, delicacy, scale, emptiness and compoeisis. The terms are extracted from the conclusion(s) and give room to messy framing and including what's beyond human capacity.

1. **Porosity** is about the permeability of one perspective into another. Technically, that can be made by a variety of materials and shapes. In terms of shape, one speaks of a fine mesh. Researching materials and their behavior requires knowledge of materials science and spatial planning.
2. **(Micro) climate** through the scales is about the external conditions that create the specific place. Depending on the scale and porosity, a diversity of linked climates can be formed. In order to work out these aspects better, the knowledge and skills of ecologists and biologists will be needed.
3. **Flow difference** facilitates development and transience. It is never possible to stand in the same river twice. Flow is facilitated by existing flows, and flows are characterized by energy, fluctuations and the movement created by them. Time is needed for the processes to work on each other. This applies to forming new balances between the processes - from idea and design to the effects of the environment on the design. Flow stands for as well for circularity, the fact that steams always consist of a loop.

Porosity facilitates the entry, movement of multiple flow. Processes don't just pass: they influence the variety of shapes and conditions. In this category it is possible to collaborate with geologists, social scientists.

4. **Delicacy** in the broad sense is about transition between zones, the accessibility of porosity, climates and processes. Delicacy seems to be about a human interpretation of beauty, but in this case it reaches to the transition zones where the scales, conditions and movements can interact. Delicacy is about a gradient, a transition zone of empathy. For this quality one can work with other designers, mathematicians and technicians. Delicacy is not only about the physical form, but also the way in which information is made visible.
5. **Scale-time indexing** deepens in on the relation between different levels of understanding. Minimal intervention and landscape and the scales in between are in a cascade of relations. The becoming of the location is in relation with its past and its future.
6. **Space for emptiness** is related to the multiplicity of meaning. An occupied building can seem full or used, but if the purpose for this building does not connect to the surrounding, it can also be seen as empty. Empty, abandoned buildings are in that sense, not necessarily empty. Using emptiness in a design means giving space to the unpredictable, unseen.
7. **Potential compoeisis** is the 'making and living with' Haraway spoke about. The design that is made is never stand-alone, but deploys the above aspects with the motive to work with the emergent and is in that sense never finished.

By mentioning those themes, the author believes design projects can be more inclusive of

what is beyond control. This is not an instruction manual, but an index for designing more open ended environments.

10.7 LIMITATIONS

We can determine two types of limitation: given and chosen. Some limitations are twofold: they can be seen as opportunities. Given limitations are concrete restrictions because they arise from the specific situation. These limitations were set by geography, language, time frame, the author's capabilities and personal affairs, access to articles and books, dependency on the realization of projects, financial means, connections and collaborations.

Chosen limitations apply further into the research. They are assumptions, beliefs, approaches and conscious explorations. The main aim of the study was to develop knowledge of the way design agency can respond to the Anthropocene. It was found that the value of the research lies in the process more than in the answers. Although the research was conducted with a thorough collection of mixed data, there were certain limitations in exploring the aim of the study. I hope that these points will help future researchers avoid facing the same shortcomings when doing similar work.

The main shortcomings I can describe for this research are related to the difficulty of applying a critical framework, the dominating role of intuition, dependency on context, bridging theory with practice, and entanglement with the author's voice and inclinations. We can give a hint as to how to deal with these limitations in future research. The combination of studies for this research and the way it has been put together created a limitation, because I found only a small amount of similar prior research in the field. Discovering this limitation served as an important opportunity to identify its uniqueness. For this type of study, where the researcher does design, journeys and

conversations to reflect on his theoretical journey, I created my own research typology, which is exploratory rather than explanatory. The goal is not to define new truths, but rather to inspire others to take new positions that stem from ideas translated into actions.

After interpreting the data, I discovered that the way I gathered information was quite chaotic, like exploring a labyrinth. It had many dead ends. I regret not using a single sample of a concept in order to reflect on my many encounters. Instead, I diverged into many topics in order to find and interpret their possible relationships. Both are different ways of carrying out a study. Future researchers might be inspired by this method, but need to be aware and look critically at a specific method for gathering the data in a concise manner. The exploratory study helped create a solid direction, purpose and meaning for future research. I suggest a more robust research methodology for the next episode of this work. This may help not only to inspire but also convince others better. Doing this might create greater impact and prompt stronger discussion.

The data used comes from other people's interpretations. These interpretations are re-interpreted. The way concepts, scientific data, method, perspectives and purpose are put together is intuitive, a mapping of a research journey. Because the work is constructed on the basis of interpretivism, there are some biases that have unavoidably influenced the research. First, *selective memory*: this means that I have remembered to think about certain works more than others, which had a strong influence on my research. I think this will always be the case to some degree, and my view is that this selective memory is also an opportunity to frame the research. Intuitively, we make notes and decisions to guide us to the next important step. I believe this can be more efficient than precisely measuring every aspect before making a decision.

The second bias is *exaggeration*. Some of the data and the interpretations have come forward as the main cause for drawing a conclusion, but it is not always clear whether there is any other data that is more significant and may give rise to another outcome. However, working on the topic for several years contemplating it over and over again is seen as the best way to battle this issue.

There are also limitations relating to the researcher. Firstly, we can say that *access* is an issue. Given that this study is very dependent on context, it has been limited by the people, organizations, data and documents that I had access to or which were denied to me in some way. The reason for these limitations was that I did not find many people with whom to discuss my research. This was a matter of context: my thesis writing did not make it easy for others to relate, but at the same time I did not meet many people who were interested in discussing this state of being. Being in a foreign country in a foreign faculty with quite a different discipline (design instead of architecture) created some misunderstandings as well. However, this later gave me an opportunity to look at my own experience and formation in a completely different way.

Another limitation is the *longitudinal effect*. Having three to four years for this study, the time to explore, focus and also review the literature, apply methodology, gather and interpret results is limited. Three to four years may seem a long time, but these are very important years of self-discovery of the direction to be taken for the rest of the researcher's life. As well the other side of the time can be considered: maybe the time to wander and get lost was too long. If there was less time taken to explore, there would have been more time to organise the lesser amount of data into a concise form. What we do find with this is that planning is important. To get lost and explore data may cost the same amount of time as finding the way back and organising data.

This quest for meaning and purpose was always my priority, rather than stating my perspective as the truth. I believe I have the rest of my life to do this. However, conducting this amount of research, which for a large part is also exploratory, in this time frame, has been limited by my capacity to learn and produce simultaneously. Because this research is a form of way finding in itself, I believe the effective outcomes are not so tangible.

However, the exploratory instead of explanatory character of this research gave me a deep understanding of the field and what lies around it. The advantage is that the research topic is not at the centre of the research, but is rather used as a way to perceive the rest of the world. Research that appeals to our research topic and even supports the statement is easier to access, as it is easier to understand and underline. Known terms and authors are more familiar and texts that affirm my bias are easier to read. When proofreading this work, I noticed that the problem stated was not directly addressed but often approached in an evasive manner. I am convinced however that this tentative approach is needed to ultimately build a new stance. In complex times like today, more exploratory research is necessary.

The research also made the assumption that visiting 100+ abandoned places in combination with literature would be enough to shape a valid perspective on the matter. This is not only a matter of quantity and interpretation, but also a qualitative manner of description. During this PhD, I made several jumps between concepts and the representation of places, people and things. These jumps might not be easy for everyone to follow.

Finally, my *background*. The research was carried out by a Dutch person in a Portuguese institution. Not yet speaking the language or knowing anything about the country's social

customs, I was just a little fish in the big social pond at conferences and meetings. As well as that, not speaking Portuguese fluently, I was limited to reading and interpreting articles in another language. Again, from the beginning I have seen this as an advantage: not always knowing what everyone was speaking about during meetings or conferences allowed me to look at the event and communication in an unfamiliar manner.

10.8 FROM SOLVING TO SEARCHING

The initial idea for this thesis was to investigate small interventions that involve people and existing flows: to think how design can address a large-scale problem on a micro-scale. However, the research process and the search for the minimal intervention made the implementation of a design less relevant since this process resulted in an unlearning of imposition. Projecting a new plan turned into imagining small interventions, turned into projecting ideas upon the place- and simulating their meaning in reflection to the references. Then, the reflection upon their meaning in the places turned into a discovery of the plurality of the existing qualities at the place. Any intervention would become a colonization of the ideas brought from elsewhere. Those projections in reflection of literature and meaning however, were useful to question and re-shape an attitude of designing. Thus the aim shifted from making the implementations to finding an abstract approach and attitude that worked generally for revealing and harboring meaning.

10.9 LACK OF TYPOLOGY

Since their shape, location and character would differ so much, choosing through a certain logic or given list (urbex websites, books about national ruins) would mean being directed as well. The choice for a location could be arbitrary. What mattered most was their diversity in form and lack of maintenance. To get a lead for finding 'abandoned places', that were generally understood by locals in all places of Europe.

In the urbanized area of Portugal the author followed the knowledge of a group of local architects that told the stories of abandoned buildings in the city. In the city I would ask locals, like librarians, students, archivists, teachers, architects, taxi drivers, elderly and new friends about the city and abandoned places. This was done in cafés, mapping through a board in the Art school. Besides that it was a matter of scanning the city for deteriorated and overgrown buildings through satellite pictures. In the countryside the

The ideas for projects slowly went from wanting to transform the place for human use, to a re-learning of a place and actually experience it should not be up to the designer what will happen. During the process, imposing design looked perverted. If the designer is going to do something, it should be a passive enabler of wellbeing. This is then done by witnessing the complexity through time and characterizing minimal interventions.

The typology of the abandoned place is vague- it is non-deterministic. It differs in size, temporality and texture. The abandoned place is a field with less exercise of capitalisation of space, nature, minerals and people. It is a field where the idea of human ownership is scattered and expresses what could happen without it. It gives an idea what happens outside the anthropocentric sphere- while at the same time, it gives an idea what happens because of the anthropocentric sphere. The abandoned place invites us to look beyond human capacity. Abandoned places can be post-industrial buildings, leftover spaces in-between infrastructure, temporarily abandoned plots in urban settings, a lacking of maintenance in a residents garden, abandoned villages, agricultural landscapes that undergo upscaling, depleted mines, nuclear storage landscapes, deserts, parking lots, roof landscapes, bunkers, car cemeteries, unfinished real estate developments.

10.10 DESIGNERS, MASTER OF NONE?

Being a designer by training at first means that knowledge of ecological and social theories, methods and facts come secondly. The core quality of the designer is to lay the link between those different fields of knowledge. But to know how to lay these links and strive for a coherent voice or vision he or she should gain a bit of knowledge of everything. Knowing a little bit of everything can look like knowing nothing precisely, since not one topic is sought out rigorously. Seeking out one topic extensively into detail would dis-balance the shifting and jumping between all the different knowledge at stake. The approach of this work can seem superficial, since it is rather deep in its broadness than broad in its deepness. This does not mean that the aims for this design approach are not concerned with creating opportunities for biodiversity and sociology. The designer's role is to bridge the disciplines, but should not do the work of the disciplines.

10.11 BEYOND HUMAN PURPOSE

In this work it was the aim to describe a non-deterministic strategy to let Anthropocene symptoms permeate into the human sphere, so that it is easier to be related to. It was a conscious choice to not go into hands-on and site-specific approaches. Human capacity for understanding the world and non-humans is limited. Human kind cannot exercise control outside this capacity. This creates a paradox in planning: with this claim, who's in the driver's seat of the future of those spaces? What should human organizations do?

A hands-on approach with humans in the driver's seat would suggest direct interventions to solutions such as introducing different species to heal a landscape and improve its resilience. However, as a post-human approach is also saying, we can question if this should always be in the hands of humans. It was never the intention to mitigate fire and flood risks or stimulate biodiversity directly.

For an area to undergo such treatment, it must first be noticed, approached and kept in maintenance. Making the world less 'anthropogenic' is also about giving space to the non-human to organize it together. This research seeks out what abstract principles and strategies can be adopted for non-deterministic planning. Of course, healing a landscape by reducing fire risks is beneficial for humans and the ecological systems they thrive in. It can help many species. But it does not seek out to let environments balance passively - the human will stay needed. How can the places that are forgotten, that have never been identified be helped and healed?

10.12 OPEN ENDED RESEARCH

An issue with open ended research and a myriad of approaches is that the objective and argument are more difficult to grasp than with a more mainstream methodology. It is inherent to exploratory research that the work doesn't clearly answer a research question, but rather reveals positions, concepts and new relevances. In exploratory research the aims are about revealing, understanding and linking, more than knowing and describing. This shows a more tentative, experimental way of doing research. The advantage is that new viewpoints and positioning can be understood, while a disadvantage is that, in the search for a red wire, this research can stay in that same level of abstracting, and thus loose connection with measurable, objective truth.

10.13 REFLECTION ON DOING THIS PHD

A Doctor of Philosophy is an opportunity to deepen the researcher's philosophical positioning and contribute value and perspective to the world. Rather than choices driven by economics, the PhD journey is the best opportunity to search for meaning and enrich our connection with life, (our) wellbeing and coexistence.

Knowledge is never separate from the context of its production. A design project, research paper or PhD thesis is strongly interwoven with the personal. The personal context is an important background that leads to new insights. To disentangle them would reduce the richness of the work.

Research, education and practice in the design field are closely connected to the maker's design thinking and their partly explicit, partly intuitive understanding.

Problem and solution are deeply entangled and co-evolve. For a deeper relationship between problem and solution, research and design can start in the middle. The first questions are about the movements between problem and solution.

The world is full of incomprehensible human/non-human creations. In order to playfully engage with all that is beyond human capacity, design needs to encompass imperfection and have the courage to act before knowing the outcome.

In order to engage to the unknown, design projects create room for the unexpected by making intentions for the unintentional. This can be done by creating forms that follow potential.

The way we imagine the future influences how we act today. Inviting as many actors as possible to participate in this collective imagination creates more chances to break through disciplinary boundaries.

The postures we adopt and gestures we make in life influence what we experience and alter in our environment. Awareness of attitude and bridging action with production encapsulates design agency's role in dealing with complexity such as the Anthropocene.

10.14 FOR FURTHER RESEARCH

The following directions can be taken for further research:

Inviting other practices

It could be informative to have more qualitative assessments of the acts of designing, writing and discussions of other practices. This is particularly the case with the fields of land-art, architecture and urbanism, because it seems these would partly overlap.

Involving expertises

The meaning of design-oriented research for other disciplines such as sociology and ecology can be investigated in future research.

Reflection on spaces has helped the process of understanding. For further research, the concept can be challenged and backed up by interviews, site-dialogues, design sessions and discussions in combination with other disciplines. The method of site-dialogue can be further investigated and linked to other fields of research. The conversations and interviews in this study were conducted informally. Some were recorded, for others I took notes. Further research may prepare a structured interview about professional designers' ideas and views on their design agency in the Anthropocene. This would make the reasoning more evident.

More design experiments

In the project, the role of research through design has been used to contemplate meaning. However, projects could be done on a larger scale to have more impact and yield more data. In future studies, we could consider providing more experiments carried out in different fields.

Broaden the spectrum of analysis

The data was collected and analyzed using a mix of methods. These methods were used unconsciously and only described afterwards. The advantage is that the data is layered and interrelated. The disadvantage is that the data becomes very complex, dependent on interpretation and difficult to compare to other data. It is the difference between open and closed systems. Further research may be very aware of this difference from the beginning and anticipate ways to compare the data beforehand.

Compare processes

It is assumed that this work might have similarities to other design research work and reflections. Within this specific context, the research is a valid contribution to the field of design, arts and communication sciences. However, further research might compare the outcomes of this work with others.

Education

The above points are an argument to continue with the research and extend this search for meaning for Design in the Anthropocene to a broader group of investigators.

To do so, I intend to apply this way of research to support students and professionals in arts and design to find their own strategies to engage with complexity. Next to working with what is asked for in their assignments, I challenge them to look beyond the assignment and investigate what is really at stake, free from the end result. To maintain this search durable and promising, I ask them to tap into their own curiosity and honesty. To use this thesis work, there are plans in the to develop a bachelor course for the Design Academy of Eindhoven, based on relating design with not-knowing and the non-human. It will be done in collaboration with the Pink Pony Express'

co-founder Annemarie van Den Berg.

Practice / Research

Stichting Urban Reef is a platform for open ended design research in climate adaptation, water circularity and stimulating biodiversity. In the projects that I set up, I encourage my fellows that it is a good thing we have no idea what the outcome is yet. Because of the construct that this thesis provided me, I feel comfortable to carry the responsibility. Since we founded the association, we have been approached by various young professionals from all over the world that want to collaborate in doing research through design. To do so, we write research proposals and apply for small funds. A handful have already been successful.

The Municipality of Rotterdam has commissioned me to redesign a public park. The aim is to mitigate water stress and involve the local residents to raise awareness and a sense of ownership for public space. Together with de Boogermanschool, a public school and the research group ID+, we are setting up an investigation to look at the role of play and design with wilderness. In this work it is the aim to include expertise, measure results and compare the work in other locations. Our intention is to make this an international project involving Portugal, the Netherlands and a yet to be contacted third European country.

Publications in all forms

This thesis contributed to setting up a construct, a background to more direct experiences, design projects, art exhibitions, talks and publications. A possibility is to translate the reflection upon those projects into a accessible book for a wider audience. This thesis work is a becoming from a tentative doctorate to a voice in research through design.



CONDENSE

know when
to end

don't over-think
- Isn't it probably
simpler than you
think

doubt biases with
curiosity, not
disbelief, imagine
being on the other
side

share your
lessons, new
knowledge, with
gratefulness

put it in a story,
convey meaning
attunement
for becoming
together

11.1 DESIGNERS, DO PHILOSOPHIZE!

To apply an approach such as developed throughout this thesis, makers and thinkers could look at the manifesto offered here. The description is not directive, but can be seen as an stimulus for a more philosophical journey in pursuit of the meaning of (their) practice. It is based on the interpretation of the before-going work. It calls the reader to positioning and action, and is a moral appeal. The manifesto underlines the individual's search for abstract principles in design related to complexity and the Anthropocene. As the Fluxus movement stated: everyone is an artist, as creation is a part of life – rather than belonging to a select group, the Avant-garde. The manifesto is purely a way to create more room for emptiness, where new linkages between philosophy and design can emerge. It does never intend to be moralistic and does not limit free interpretation.

The manifesto relates to the valuable knowledge created through designing, positioning design research as a strategy for complex problems and advocating ease with being out of control. We are not just our ideas – we are feeling, thinking and doing – constantly influenced by inner and outer worlds, deliberately or unconsciously. Our collaborative making of life is influenced by our feeling and thinking.

11.2 VOICE

As I have learned on this journey, there are many positions and voices from which to choose. But I also found that this is not what matters most. What matters most is how we reason with ourselves, how we position ourselves within totality. Makers and thinkers should not be afraid for complexity. It is fine not to understand it. More than advocating one perspective, we may advocate for a way or space to shape perspective. Your voice matters – build

the strength to believe in your perspective. We must dig deep to find this strength.

I see so many people with problems finding their own voice who are dominated by voices of others. But we are equal and we, and our experiences, are as valid as any others. It is also a matter of confidence and experience. But all too often, we seem to hold ourselves back from 'really thinking about something'.

Everyone has a voice; everyone can be a philosopher. To be daring to dwell in complexity, we need everyone to be a philosopher. A love of thinking about the 'why while doing what' can be seen as a state of being, like an explorer, lover, host or driver. I think it is important to have a mindset of curiosity, a love/wonder for the world and the capacity to study the world from multiple perspectives. Philosophers are interested in the fundamental questions behind our actions, perception and thinking. A designer who is solely concerned with how to make a 'beautiful' design is not a philosopher. But when they begin to question what the ideal design is, what beauty means, to question of the role of its maker, the product, the purpose, the user and the values this ideal brings into the world, we are one step closer to becoming a philosophizing maker. A step further is when the maker uses the process of making and projecting as a way to reflect upon the philosophies.

Makers are shapers who consciously or not, reveal new values to the world. Makers can apply design skills to find depth. Depth can be achieved through diverging and always reflecting along the way. Then, as in grounded theory research, trying to create an overarching story – this is the story of the reflective practitioner described by Schön (2007).

11.3 AND/OR... PHILOSOPHIZE THROUGH MATTER

Philosophy seems a matter of reading and writing texts, but that is not necessarily the case. Philosophy literally means 'a love of pursuing knowledge.' The nature of that knowledge and how it is packaged is free. Many philosophers work with books and texts. However, many of those books are unfortunately quite inaccessible. Makers are shapers that can convey and question meaning through their designs. Design offers the opportunity to convey new ideas about the world and to inspire people through the experiences design gives. Design might even have an advantage over the realm of written ideas, because a design can touch multiple realities simultaneously. With the translation from philosophical value to question, design interventions automatically become entangled and are influenced by their environments: contaminated. A design should not just be a container for a message or meaning, but be an act of the meaning itself.

Becoming 'noise-wise' (rather than noise-dominating or screaming-over) is a matter of learning how to deal with the number of options and perspectives we find. It is all very well to look at multiple perspectives, but we cannot really see how to organize these options. And we never know at the start which option is the best to take. We must therefore explore them all, at least a bit. This is different to screaming them out loud, dominating them. And along the way, we can make a categorization that will help forge new directions. Towards the future. Design is one way to orient ourselves in this maze of possibilities. Design is a way to become 'noise-wise.' As the word 'wise' suggests, it is something that comes with experience and time. It is not only knowledge, but also wisdom that is needed. Being 'noise-wise' is to trusting the bigness of the world, the fact that things do not revolve around our own thoughts but deal with the connection of all players in a large field

of objects, all with their own private lives but all interrelated.

11.4 ANIMIST APPROACH TO GAIA

For a new mode of living, design agency can be driven by a new, fitting and fulfilling aesthetic. This 21st century aesthetic should be focused on becoming together in the Anthropocene, while advocating perceptual abundance and new wilderness worlding. If we want to address Gaia as one being- what approach do we take?

As a child, I believed that not just humans, but all animals, plants and objects had a soul. I believe that this rather spiritual (animist) approach to the world can be helpful in finding the new aesthetic. Giving objects in our environs a soul or spirit changes our attitude. If we assume objects are soulless, we throw them away with ease; they are just cold, hard, meaningless objects. But all objects are representations of ourselves; they are mirrors.

Treating material as worthless can be a rather aggressive attitude. The 'loving our monsters' concept is about loving imperfections in ourselves in order to embrace the conflicting world around us. By perceptual abundance, I mean giving greater acknowledgement to the richness of perspectives and senses that mark the subjective. This abundance is, at the same time, our roadmap to becoming closer to ever-changing morphs of truth. Abundance indicates a positive outlook, radiating trust in the togetherness of what we cannot understand.

11.5 NEW WILDERNESS WORLDING

Worlding means the becoming of the world, the forming of a body of coexistence. By the concept of new wilderness,

I mean new life emerging in new shapes and with characteristics of population that are beyond our understanding, let alone control. Putting these words together, it means that in order to become together, we need to create empathy for otherness, love our monsters, embrace unfamiliar processes and the near-but-far presence of hyper objects, as they prepare us for an open attitude of constant change and inter-digestion. Design, art and technology can be instrumental in transitioning to this new attitude by creating opportunities for humans to get acquainted with processes of becoming. Design, art and technology can, through new experiences, introduce us to the multiplicity of the concurrent and the richness of future realities.

As discussed earlier, interventions for the unintentional are meaningful when they either impact the way people think and experience the landscape as a source for wellbeing, or when they influence natural processes to exceed previously regimented expectations. The most effective would be when both happen simultaneously. Interaction with processes that happen beyond our control might make us more aware, humble and careful. Design in the Anthropocene with the mission of becoming together can also be done by making design instrumental in order to entangle life. Entangling life means creating opportunities for different critter-populations to encounter, interact and mesh with each other.

Becoming together goes larger than that, and by using critical and creative lenses that go beyond the idea of anthropocentrism, we have to explore the boundaries of what is the 'we' that the humanities are exploring. Seeing what is at stake, the object of study of the humanities is no longer 'man' (Braidotti, 2019).

11.6 A GARDEN OF LOVE

We can reclaim the Garden of Love as a 'weak anthropocentric' metaphor for design in the Anthropocene. It stands as a metaphor for reconsidering pre-enlightenment values, while being re-spirited with new motives derived from coexistence and wellbeing. We have seen the concept of the garden of love in older civilizations as a way to find inner peace. For example, in medieval times, the *hortus conclusus*⁷⁸ showed a better world behind closed walls: a garden of Eden. The enclosing of the garden created a dualism between big, wild nature out there and the good, safe, tamed version inside.

That world inside was a dream of a better world, expressing values of togetherness, play and peace. In the Renaissance garden, wilderness was approached as a mystical way to connect to a higher being, a higher purpose. Connecting art to the mystery of nature enriched its meaning. The garden was a constant dance between human and nature, an ongoing discussion of its balance. While still a dualism, its approach would be more respectful. In later periods, the Enlightenment and the Industrial Revolution, the domination of nature by culture would become more important again (Steenbergen & Reh, 2003).

But today we must imagine new representations of our world. We must rely on the values of the garden of love, but not only those relating to its mysticism. We must think of a better world, but not one behind closed walls. It should not represent a place of utopia. This place is for survival. The Garden of Love in our age should be a re-enchantment of love – a pragmatism

towards love, care, pursuing knowledge, and empathy. The Garden of Love is an environment in which things are given a soul and meaning. Devices can help us rekindle care, friendship, empathy. These are movements that can spark our inner compassion. From a *hortus conclusus* '**enclosed garden**' to the world as an assemblage of multiple gardens: 'a planetary garden' towards something new. The aim for those assemblage would be togetherness: to witness the other, the state of the earth and ourselves.

Such place is a garden to witness: *hortis testis*. To witness in order to (re)connect, partake, interact, de-sign, design. Compassion is not just for the other, but for a world-view of being other together, an acknowledgement of being part of a whole. A pragmatic animism. As part of the human condition, we cannot have control over the world. Again, we need to think about how we approach the world around us: to think about how we can become literate and unlearn that are redundant for the wellbeing and survival of 'critters' in our age. If we take new romanticisms into account, design, art and technology can provide us with new articulations of the world around us.

11.7 DESIGN IN THE ANTHROPOCENE

Design in the Anthropocene should advocate a new appreciation of ambiguity, informed by the language and invisible values of the public sphere. As such, this is a manifesto for re-enchanting the idea of the garden of love; inform the abundance of perceptions and dynamics that enrich the world; shape environments that allow new unknown dynamics to emerge; enable emerging events to become; practice empathy for objects and space in our environment; mesh together motives of becoming for the entangling of life.

78 *Hortus conclusus*. The name the medieval enclosed garden. The Enclosed garden relates to the landscape but at the same time closes off from it (Aben & de Wit, 1999).

Design and technology in the Anthropocene empower spontaneous processes of change and articulate them by making them perceivable. With this approach, the problems of perception, uncertainty and response-ability come to light, and need to be explored through interdisciplinary practices.

11.8 CHANGE DIRECTION

The many changes that are happening in the world include biodiversity loss, global warming, mass pollution and the digital age. These are changes that are not really visible to the human eye or human subjectivity: they are hyper objects (Morton, 2011). Frequently changing direction, *an art of discursiveness* could be a strategy for looking differently, with new perspectives. The biggest challenge in society right now is that of *changing direction*. The following list of points is meant to be translated into a card game. It is a simple card game with hints for further discussion (see Mosaic's Clue Cards, page 253). They are intended to spark debate, or rather dialogue. While debating can be about being right, proving the other wrong, winning or losing, waging war, seeking flaws, seeing opinions as the truth and hoping to convince others with your perspective, a dialogue takes a different path.

The realization that human existence plays a major role in disastrous changes on a global scale results in greater recognition of complexity. To deal with this complexity, there is a need to generate new strategies and adaptive approaches.

At the plateau of complex truth, the perfectionist Apollo undergoes a 'mental breakdown'. Greater and greater costs and sacrifices are required to simulate certainty, but uncertainty and change remain. Apollo must choose: Will he continue to rely on order, and risk a mental breakdown? Or will he surrender his control? In the Anthropocene, the roles of Apollo and Dionysus seem to shift. The hedonist Dionysus is used to moving in chaos. Could Apollo let go of control and trust Dionysus?

This thesis explores the potential of an open-ended research through design. The conceptual analysis of this work was formed by a mosaic of going to abandoned places, meeting locals, reading literature and making drawings. The work is a deep dive in the unknown and complex.

The aim of this thesis is to build on and contribute to the field of strategic design. It does so by assembling a myriad of approaches and philosophies related to design and complexity. This open-ended approach resulted in novel linkages between research through design, ecological-social constructivism, and designer's actions. It thus shows that new discoveries can be made with 'unstructured' work. It shows, in other words, that trusting Dionysus may be worth it.

A few words on what this thesis is not. Although this thesis emerges from descriptions and analyses of post-humanism, urbanism, landscape architecture, social sciences and ecology, its aim is not to match or follow their frameworks and methodologies.

What this thesis does do, is to present a broader perspective on the role of research through design than is usually managed, within a longer time frame (3 years), uncovering linkages between philosophy, the environment, and design. In a way, this thesis itself is a design experiment.

The aim of this design experiment is to answer the following question: why, how and what can research through design activities beyond control contribute to a better understanding and response to complexity?

The argument at the core of this thesis is this: an adaptive, exploratory type of research is needed to deal better understand complexity that is at the root of many contemporary global challenges.

To argue for this claim, this thesis does not intend to provide a detailed analysis of forms and objects. Instead, these forms and objects are presented as a means to uncover how unpredictable, invisible relationships can stay, be enabled and be acknowledged in their unfamiliarity.

The advantage of this open-ended research approach is also its disadvantage: a multiplicity of findings. So many small findings, that a single conclusion is hard to formulate. The advantage is the way it is contributing to a broader, contextual understanding of the situation, being deep in its broadness. The disadvantage is that this approach is not broad in its deepness. Many small jumps are made and categorized in order to deepen understandings, but these do not add up to a singular conclusion.

Nonetheless, the overarching outcome of this thesis can be characterized as follows: Minimal interventions are relevant in the context of design with complexity since they can reveal notions that were unseen before. The design and its process can help to gain comfort being out of control of situations. This work doesn't

have a clear answer, and it is exactly that what is relevant: questions rather than answers help to adapt to, encounter and rediscover the invisible and undetermined. Instead of being driven to find results and draw conclusions, we can rather ask: what questions can be asked differently?

Designers seeking new attitudes to the environment without seeking to impose intervention or control or a certain vision onto it is an important contribution to the debate of design. Throughout this thesis a shift took place from 'finding and solving problems with design' to 'scratching the surface of complexity'. This change of premise resulted in a different character of this thesis than was originally intended. Instead of describing and organizing the data and deepening on specific experiences and reasoning for new interventions at the sites, this aim was deployed as an activity to broaden the perspective about new conceptualizations. It resulted in the conceptualization of an attitude rather than a definition of space, design or agency. The originality of this work can be summarized as follows:

Unique context. The work is a contemporary journey in research through design, relating recent and old literature, references and environments while addressing knowledge from the fields of arts to exact science. The work presents extensive research through design in a social constructivist perspective.

New conceptualization. This work makes the case for deploying new and erratic approaches to complex problems. By applying mixed methods adaptive to the situation it develops a conceptual approach tailored to its context.

New positioning. This thesis seeks a less intrusive attitude for design. It takes this position so seriously that the role of designer as shaper is replaced to that of a balancer.

New relevancies. More than new measurable results linked to the objectives, this work states new relevance for acting beyond control and the role for the minimal intervention to redirect to unseen realities and relevancies.

New questions. Instead of providing a solution to a specific context, this work brings new questions in order to get a broader understanding of the context.

Finally: this thesis is a mosaic of ideas and experiences. It is not intended as a stand alone piece. It is an attempt to reach, through many singular findings, towards an attitude or strategy towards a complex picture. This attempt resulted in a better understanding of a 'unstructured' approach to complexity.

In dealing with that approach, design research can provide support by drawing attention to and facilitating multiplicity, an 'ecology of truths'.

Dealing 'beyond control' isn't descriptive, it is exploratory. It is a stage and attitude where future projects and relationships can come to play. Exploratory research is a continuous search, a never-ending prototyping process. Therefore, the work is never finished. Yet by constantly applying this attitude as a background to concrete, practical projects, places and ideas, new relevancies, concepts and positioning can be discovered. By this iteration process, they can aid the sharpening and detailing of final pictures.

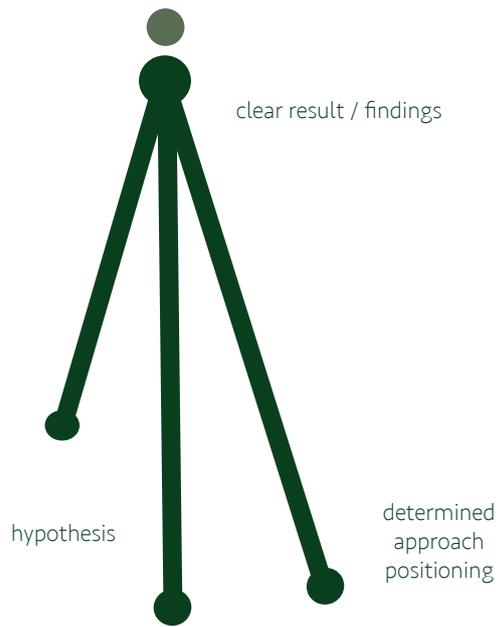


Fig. 58 'linear research' Research leading towards an determined ending - a wanderer above the sea of fog

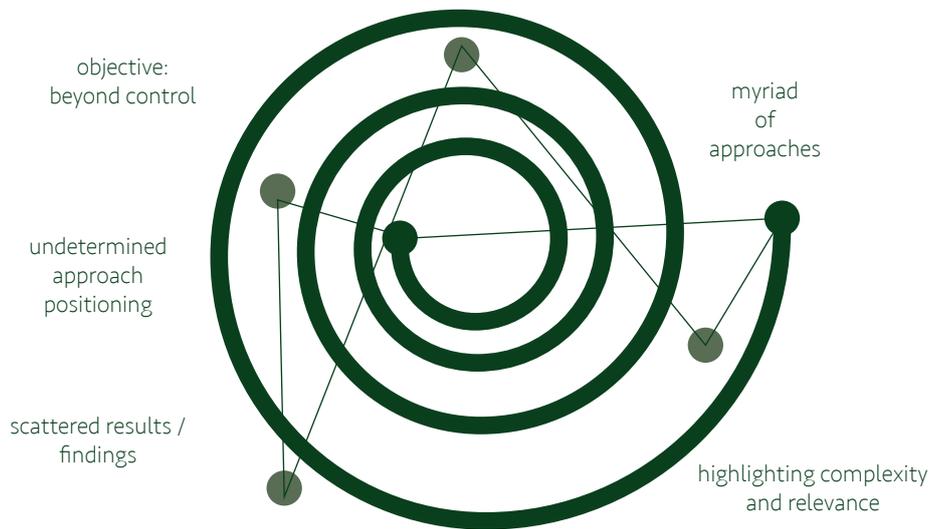
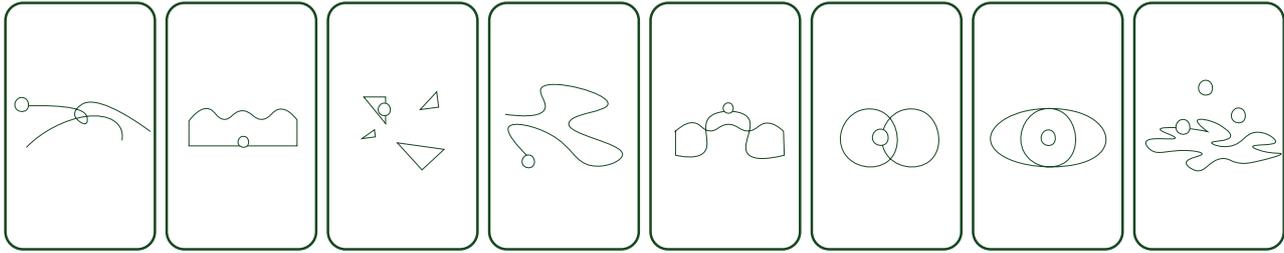


Fig. 59 'exploratory research' Research leading to a field of relations- a co-existence of truths at the plateau of complex truth

MOSAIC'S CLUES CARDS



ENTANGLE

SUBMERGE

SCATTER

WANDER

EMERGE

CONTAMINATE

DIGEST

CONDENSE

no need to make a decision yet, decisions are also just ideas

dance around problems from different angles

be free to interpret concepts with visualization imagination

get lost; wander off the path; trust a path will be found by walking it

find strength in the projects and voices of others; you are not alone

translate into shape, your values can be materialized and speak to other languages and realities

make a work about the work. what is 'integral' to your traces?

know when to end

instead of dualisms, look at balances, nuances in between them

doing and learning can be without solutions, data is neutral

make concepts readable to your younger/ older self

break into places that resist, they might want to tell you something

redraw other projects in your language, re-enchant other voices. it honors them

everything is a prototype; allow the thing and its surroundings to flow into each other

reflect at what decisions have been made; what values do they represent?

don't over-think - Isn't it probably simpler than you think?

be kind to (your) subjectivity - love it, it's a source

collect perspectives and mindsets for insight to your biases

concepts are language: play with your new articulations

be aware how context alters your choices. we are vulnerable to our surroundings

you can be silent sometimes. projects can speak on their own

allow the idea to live without you, give it autonomy but not abandonment

what can it do for the future,? what does it set in motion?

doubt biases with curiosity, not disbelief, imagine being on the other side

find patience to let problem and solution unfold simultaneously

always fail, but without failing. get comfortable with not knowing as way to rise

imagine concepts in another galaxy. imagine how would they unfold?

connect the direct context to your concepts. use them to speak to your surroundings

reveal your intentions and what was unintentional

make decisions for experimentation, imagine assemblages of future realities

over-arch the smaller stories, find the common deviation

share your lessons, new knowledge, with gratefulness

approach complexity with honesty rather than confidence

explore your options. you don't have to simplify or decide right now

use other perspectives to love your monsters

break the rules of everyday life
climb a fence, ask a question

perceive what seemed hidden, look at what is found

be influenced by reactions, place yourself in concurrent multiplicity

accept that you will always swim in unknown depths?

put it in a story, convey meaning attainment for becoming together

BEYOND CONTROL

design agency in the anthropocene

3 approaches for doing a PhD

- "A + B = C" Planning forward**
executing research through a clear path / scope determined beforehand, then concluding the outcomes
- "C - A = B" Strategising towards destination**
executing research with a clear estimation of the end result in mind, then reasoning the path
- "C = AB" Living the problem**
executing research without clear path or scope but building a construct of what's important - risking a cohesive finalization, but a higher chance for involving what's at stake at the context, the relevance and involving findings along the way

"Landscape architects and designers should reconsider which values they want to support, and how those values translate into their design action. The supposed continuity between human and non-human actors is currently leading to large scale implementation of design in which critical reflection and political choice are squeezed out by a fascination with non-human actors, systems and processes."

De Block, G., & Vicenotti, V. (2018). The nature of post-human landscape design. In *Landscape Architecture Europe's 50th Anniversary*, 104-119.

intent finding a way to position the role of the designer in taking action towards critical issues

addressing complex, urgent, invisible problems while acknowledging their subjective stance within a larger field of perspectives

-> A matter of "response-ability" this research demonstrates this search and share outcomes that might contribute to designers to position themselves critically

path is influenced by unexpected data coming from context and subjective interpretation

complex reality

subjective reality

some problems we can not simplify some problems we should not simplify - there is a new urgency to address invisible problems in the world since they become apparent and threatening for the story we tell about ourselves

we can not calculate the self out of the actions we take in the world - we need to address the context we are in as part of the construct, our bias, we can not grasp the end of the cosmos as much as the depths of our consciousness.

Thrownness (German: Geworfenheit) is the concept introduced by German philosopher Martin Heidegger (1889-1976) to describe humans' individual existences as "being thrown" (geworfen) into the world.

by inviting complexity and subjectivity to the table, the conversation (...)

conclusion

clue: context is contingent ever changing and too complex to (...)

clue

INVOLVING STORIES "TOO BIG"

too complex?

what are "giant" problems?

grounded theory

INVOLVING STORIES "TOO SMALL"

front end

how to acknowledge subjectivity?

too subjective?

research for design

difference and repetition Gilles Deleuze

the embodied experience valid inquiry of knowledge impossible to distinguish from "single objective truth" which doesn't exist

ENTANGLED

hermeneutics

Phenomenology

Khan, S. N. (2014). Qualitative research method - Phenomenology. *Asian Social Science*, 10(21), pp. 298-310. doi: 10.5539/ass.v10n21p298

clue: the self is valid, subjective experiences are a rich source we have to take in account beauty, empathy, emotion, meaning if we want to understand our motivations

UNFOLDING TOGETHER

what positions can we take?

engaging with previous conversations

reverence

de-growth

anti-humanism

post-colonialism

post-humanism

technocracy

sym-biosis

denial

Reassembling the social Bruno Latour

by inviting complexity and subjectivity to the table, the conversation has to unfold not by setting a path, but by acting self in complexity and reacting to others

the challenge: not thinking towards the end

With not having the end result in mind, but rather practicing the capacity to stay open until the end, research and design can unfold ungraspable topics together. The "fuzzy front end" is always existent in wicked problems. Instead of trying to solve or simply this, the fuzziness is an opportunity to let in alternative perspectives along the process.

positioning: everything is a construct

embarking on a journey with no direction. a matter of choice or a matter of context? We are entangled with our situation. Can we involve invisible worlds, problems too complex to see and too small to seem significant? Can this seen be seen as valid research?

wicked problems

large scales

long time frames

unpredictable behaviour

clue: context is contingent ever changing and too complex to generalise. taking in account such complexity requires an approach with the subject de-centralised

relevance: urgent but invisible problems

looking into those invisible hyper problems, how can we describe them in the world around us? What are examples of those giant problems? And why does it matter what kind of positioning the one facing those problems is taking?

mass extinction

climate change

pollution

shrinkage

the anthropocene

landscape

clue: the world is everchanging

clue: this time: wilderness of life at stake

clue: this time: human survival at stake

the nessecity of voice: being able to respond (response-ability)

Combining three themes that arise: complexity, urgency and responsibility, the role of the own voice comes forward. More than resolving and understanding those problems, the ability to respond to what is known is important - it leads to the role of activism in architecture and design. To be able to respond, designers need to be aware of their positioning towards the matters, may they want to translate those into (architectural/design) matter.

literature review: making sense of vague space

The way to understand this complexity is by meeting it in our daily lives. How can those problems be understood in our direct environments? What spatial forms are symptoms of those problems? How do authors describe those places and what can we learn from them?

literature review

how did authors describe vague places?

terrain vague

wildscapes

entropy

fourth nature

third landscape

clue: the ambiguity of places is also that what makes them interesting - the ability to think of new ways and be critical about their own environments - those places are rich of other realities

urgency to address complex issues dealing with uncertainty and the unknown

what are their signals in our daily environment?

observations general to specific

there is a mistrust in letting things be or thinking creatively how the spontaneous can enrich us in unexpected ways

grounded theory: the role of experiencing space

How do those places take form in European cities, and what can we learn from visiting them in particular? Why is it important to wander and encounter those places?

principles of landscape architecture

Sebastian Marot

Aalborg, Denmark

discussing northern landscape if Leo Lourensen

shrinkage areas

post industrial spaces

interstitial space

vacant land

Barcelona, Spain

how can we read landscape and place?

how did designers transform sites?

curating decay

Catryn Deslvey

de zandmotor

building with nature

convey meaning

minimal intervention as approach to alter perception by accessibility/readability potential for autonomous emergence

what is my mindset and why?

experiments

Doing design is a way to do research, research through design. The situation of making design ourselves is an opportunity to involve context within the process of making - compoeisis. Making together with place.

research through design

from nature-inspired design to design-inspired nature

site visit

making time visible making multiplicity visible stimulating new beginnings letting go of control co-design with animals

design for encounter of the other

Working with nature is not framing their boundaries, nor steering its powers to shape land for our desires. Working with nature is creating adaptive systems that are able to respond to emerging ecosystems - it is a willingness to give up our own territorialisation from above for what is coming from underneath, within.

designing together = making together

Dreaming together through fictions creates a togetherness in which designers create fictions- those fictions are useful to test and burn our fingers to potential futures- fiction is a way to play with the future, and to explore in which we are comfortable and not. By including the other into the future, dreaming together is enabled.

the intervener as intervention

Finally, by engaging into the multiplicity of perspective there is upon space, the intervener has to understand its role- a role of humbleness towards the future of place. Working with the unlimited multiplicity of place, design can work as a frame for stimulating decent relationships between those different realities.

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reference studies: approaching articulations

Landscape architects read the spaces in a particular way, where they are sensitive for the invisible problems and opportunities that are existent at the place. How did others enable the potential of place by their physical designs? What were their mind-sets?

Whitehead

beauty redeemed Ellen Braae

de zandmotor

building with nature

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experiment: letting design/art speak

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reflection / novelty: the journey's worth

Being led by intuition and the research going its own way is a way to do research: it means the researcher has an open attitude to its topics and results. The shortcomings of this work are definitely its predictability.

hermeneutics

exploring relationships

minimal interventions are ways to frame/point out

new perceptions and relations

so futures might develop in a new way depending on those related to the intervention

anticipation works by creating space for imagination

specific to general

re-framing can be done through shape but is more entangled by designing together design is about what is left open the perception of the visitor is led from within

we need imagination to anticipate for the unexpected

RELATIONS OF DECENCY

design and art for altering perception meaning

making visible complex matters responding to landscape and place reminding us of the sideness of our own realities

inviting future conversations

future realities - agency

What is important in uncertainty, is that we create possibilities for ourselves to act, respond and anticipate to the complex. For this, the designer has to be aware of its subjective stance towards issues in the world: where engineering solves the problem at the place, design helps to prepare for the possible, imagination can bring different realities further. Design agency beyond control works to make the future imaginable but does not steer it.

outcomes / knowledge transferability: to give to others

Design and art makes us understand that there are realities we can not understand. By acknowledging this darkness amongst us, we stay open for alternative realities and futures. Design agency in the Anthropocene should fully embrace the uncertainty - designers should therefore seek to make designs that point out encounters and potentials for diversity at place.

deriving from the outcomes, what are keypoints of concern for design in the anthropocene?

design can work as a door to other perceptions of place perceptions we need to be reminded of in times of complex urgency to

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