



Royal Danish Academy

Architecture Design Conservation Front/back:

Archive of flowers from around the world by author and grandma Bodil

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Abstract

How can planning, in a Danish context, evolve in a more-than-human way, in a time with a need to create space and opportunities for interspecies entanglements and collaborative survival wherein culture and nature merge for humans to connect with nature in a way that moves beyond the anthropocene?

Despite today's context of climate crisis with nature catastrophes etc. and science trying to make us understand the urgency to act in any possible way, humans find it difficult to grasp and act in the way that is needed. Since the philosophy of the enlightenment, humans have been separated from nature and the anthropocene is a concept that describes the current geological epoch caused by this understanding of nature - a universal and beautiful thing, for humans to master and exploit.

To be able to understand the climate crisis and the urgency of acting as needed, it is necessary to move beyond the anthropocene. To do so, we need new ways of telling stories. How can architecture, as an interdisciplinary practice, become able to create, tell and imagine new stories and other worlds?

To explore possible ways of dealing with the climate crisis and the consequences of the anthropocene, this written thesis will investigate theories of moving beyond the anthropocene taking its starting point in the idea of the Chthulucene and by analyzing concepts such as the "interspecies entanglements", "kin", "plantationocene, anthropocene, capitalocene", "story-telling" and "becoming-world".

Two case studies of space-making practices considering the more-than-human and concerned about the (dis)connection between human and nature will explore possible methodologies of moving beyond the anthropocene. Firstly, the practice of the contemporary witch, that makes space for other ways of everyday life in connection with the more-than-human. Secondly the practice of curating in city/landscape and making space while dealing with questions of collaborative survival.

In the time of a climate crisis an interdisciplinary approach is crucial when being able to consider all kind of live affected and involved in planning and when making space for interspecies entanglements, kinships and justice.

A new chthulucene methodology of moving beyond the anthropocene when planning, will open up new agencies, other types of collaborations and also consists of some degree of uncertainty. It is apparent that the discipline of planning needs an expansion of its toolbox when dealing with the consequences of the Anthropocene. An "antidote field guide" or a "cyprianus" as a concept describing a new planning methodology consisting of cross disciplined knowledge and local knowledge and stories can be of use. Other parts of the witch practice (the witch-tools, calendar and list of herbs) might also be important tools for planners when using the methodology of the cyprianus/antidote field guide to move beyond the anthropocene.



1. Artwork by Wura Natasha Ogunji "Phoenix phoenix"

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Terminology

Anthropocene

Paul Crutzen and Eugene Stoemer
The current geological epoch where
humans are the greatest impacter on
the condition of the earth



Assemblage

Different materials gathered in a spatial or three dimensional collage/collective

Becoming-world

Deleuze and Guattari

A process involving interspecies encounters affecting transitions from one state to another of those involved. It is appreciating the shared, condition of the world and what human, more-than-human; fauna, flora etc can do together.





Becoming-with

Donna Haraway

A process rooted in encounter and connectivity rather than in separation and difference while being aware of the importance of human responseabilities in the relationships with the more-than-human.

Capitalocene/plantationocene

Donna Haraway

The exploiting and earth changing processes and transportations of breeding plantas/animals/people simplifying worlds to produce the wealth connected to growth and progress fx. palm oil plantations

Carrier-bag

Ursula K. Le Guin

A container for material, knowledge and/or stories.



Collaborative survival

When all living beings, cross species, gather forces and collaborate on survival for all species on the damaged earth



Chthulucene

Donna Haraway

Concept describing the current epoch as a time for staying with the struggles of living on a damaged earth by learning to enable collaborative survival



Connectedness

A state of being joined, belonging to or having affinity with something/someone/somewhere.



Contemporary witch

Humans in current times, with a lifestyle inspired by old pre-christian scandinavian witch-culture

Curating

Selecting, organizing and presenting a collective of items in an exhibition

Cyprianus

Danish term for the witch's book of magic scripts



Human

A human is of the specie Homo sapiens. "A highly developed, social and culture-creating being"

Humming

An undefined pre-language of indistinctive sounds. A possible language of entanglements between humans and more-than-humans



Hyper-seperation

The binary thinking of conscious and acting human as opposed to unconscious and passive others/ more-than-human





Interspecies entanglement

Anna Tsing species of all kinds engaging with all species connectedness and co-dependency



Kin

Donna Haraway

A kinship that is other than the biogenetical and is not tied to genetics but happens across gender/class/nation/race etc.

Magic

Phenomena that have to do with secret knowledge, great dexterity or skill with the intention of influencing the divine powers. "Utilization of supernatural powers"



More-than-human

All living species of any kind. A concept collecting all living beings wherein human is a tiny part and not opposed to.

Planning

How "we" organize our lives to thrive in porously bounded spaces in which there is some degree of inter-connection, a distinctively diverse economy and ecologies, multiple path-dependent trajectories of transformation and inherited forms of rule.



Story-telling

Collectively sharing and acknowleding knowledge of any kind as wealth in world-making and as an important tool to imagine and know what to do when living on a damged earth





World-making

collecting and combining knowledge and experience of all sort in the way of existing, interacting and making sense of the world

Introduction

Thematics and research field

Human influence has undeniably caused climate change, affecting weather and climate extremes. Global warming will continue and exceed 2° C unless emissions of CO_2 and other greenhouse gasses is drastically reduced. In addition to that, many of the changes caused by CO_2 , and other greenhouse gasses emitted in the past, present and future are irreversible.

In a time of a climate crisis with natural catastrophes, extreme weather, displacements of humans, extinctions of species, and with science trying to make us understand this, and the urgency to act in any possible way, humans find it difficult to grasp and act in the way that is needed.²

Since the philosophy of the enlightenment, humans have been separated from nature. In today's Danish context, humans are not only separated from nature in our understanding of the world but also physically - Denmark consists of very little wild nature and the main landscape is a production facility.³ The anthropocene is a concept that describes the current geological epoch caused by an understanding of nature as universal and beautiful, for humans to master and exploit.⁴ To be able to understand the climate crisis and the urgency of acting as needed, it is necessary to move beyond the anthropocene. To do this, we need new ways of telling stories that do not separate nature and human and in those, it is necessary to include other than the scientific perspectives.⁵

The intention of this written thesis is to investigate how these stories can be told and to explore and discuss how architects can play a role in making space for this. It will look upon human-scientist theories and the philosophy of moving beyond the anthropocene, based on the idea of the Chthulucene - a time for learning the struggles of how to live responsible on a damaged planet, all species together. On the basis of this, the role of architecture in the time of climate change will be explored.

This written thesis will discuss how architecture, as an interdisciplinary practice, is able to create, tell and imagine new stories and other worlds. When discussing how to create space, which connects culture and nature and allows for interspecies entanglements and collaborative survival, the written thesis will use a case study looking into the practice of a contemporary witch - an already existing way of making world, which in a pragmatic way, connects with the theories of moving beyond the anthropocene. Furthermore, the exhibition "Hummings" (KØES, 2021) will be used as a case study to analyze and discuss how these theories and methods could unfold in the discipline of curating, another way of creating space.



3. Wildfire in San Fransisco Bay area of California, United States $photo: Liu\ Guanguan$

Research question

How can planning, in a Danish context, evolve in a more-than-human way, in a time with a need to create space and opportunities for interspecies entanglements and collaborative survival, wherein culture and nature merge for humans to connect with nature in a way that moves beyond the anthropocene?

Methodology, theory and empirics

Firstly, this written thesis aims to define the anthropocene and the consequences of this in today's context of climate crisis and, importantly to address, from a Western worldview. As an urgent crisis for all disciplines to consider and act upon, the written thesis will look into how planning has been affected by the anthropocene and vice versa. To explore possible ways of dealing with the climate crisis and the consequences of the anthropocene, this written thesis will investigate theories of moving beyond the anthropocene by analyzing the following concepts, a.o.: "chthulucene", "interspecies entanglements", "kin", "plantationocene, anthropocene, capitalocene", "story-telling" and "becoming-world". These theories will also be used to investigate and question the role of the planner, the practice of planning in today's context and the possibilities of making space for these theories to unfold.

Through case studies of two types of practices, the contemporary witch and the curator, this written thesis will explore the role of planning in the context of the chtuhlucene and discuss the elements of a possible methodology on creating space. The theories and cases will be discussed in relation to each other, and explore what each of these can bring to the table for planners in today's context of climate crisis. Finally, this paper will propose an answer to how the theories, in combination with the two practices, could unfold in the discipline of creating space, in a more-than-human way, for planning to become a way of considering and acting on the climate crisis.

The theoretic analysis of this assignment will focus on the following:

- "Making kin in the chthulucene: reproducing multispecies justice" (Haraway, Donna)
- "Make kin, not cities! Multispecies entanglements and 'becoming-world' in planning theory" (Houston D et al.)
- "A feminist project of belonging for the Anthropocene", (Gibson Graham, J. K.)
- "The mushroom at the end of the world: On the possibility of life in Capitalist Ruin" (Tsing, Anna)

The literature is chosen as it represents various disciplines and thereby contributes with different viewpoints concerning the same topic. They are all contributing with another view upon the climate crisis than the usual nature-scientific view, which is relevant for this written thesis, when considering the interdisciplinary aspects of planning. The litterature represents philosophers, anthropologists, geologists and planners.

This written thesis include two case studies. Although they are not planning projects, they are different types of space-making practices considering the more-than-human:

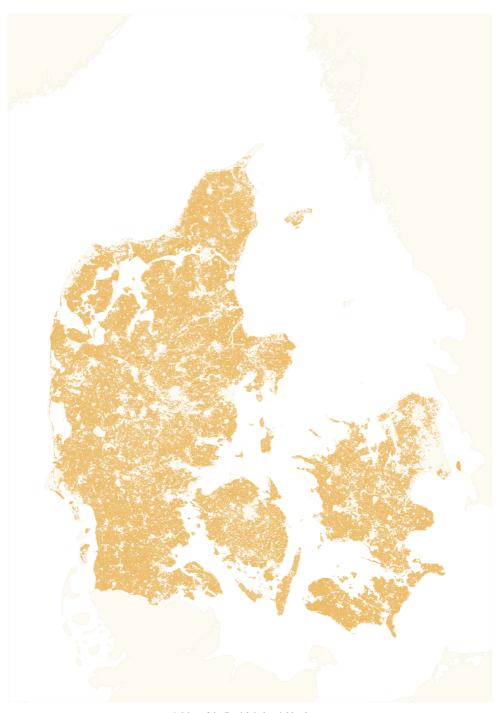
Case study I: "Heksens håndbog" - A practice of the contemporary witch

Case study II: "Hummings" - A curator's practice of making space

The first case study is about the practice of the contemporary witch accessed through the book "Heksens håndbog" by

Dannie Druehyld, who has practiced the lifestyle of a contemporary witch throughout her life. It is a practice which makes space for other ways of everyday life, in connection with the more-than-human. The second case study is of the exhibiton "Hummings", by KØES taking place in the public space and landscape of Køge and is a study of the curator's practice of making space. The exhibition is inspired by the anthropologist Anna Tsing and is dealing with questions of collaborative survival. They have both been chosen because of their contemporary practice - they are both, in different ways, concerned about the (dis)connection between human and nature.

The reason for choosing these case studies, is to understand how the theories of the literature can unfold in physical and world-making practices. Both case studies are widely directed and propose other ways of world-making concerning all, and for everybody to interpret and interact with. In a planning perspective, it is relevant to investigate other practices of making space, whether it is in the city, landscape or in the everyday life, to explore how to plan both social and intimate spaces in a more-than-human way.



4. Map of the Danish industrial landscape graphic: By author



5. Zoom in of Map of the Danish industrial landscape $graphic: By \ author$

The climatic crisis of the anthropocene

Human detachment from nature

"It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cyosphere and biosphere have occurred." The most recent IPCC report from august 2021 scientifically and thoroughly clarifies the daunting influence of human behavior as devastating and climate changing.

Human behavior is governed by traditions, habits, values, opinions and the physical space. When researching climate change and the solutions, it is therefore a necessity to include human sciences⁷, and because the climate crisis is a consequence of the human way of thinking and behaving, it is this culture that needs questioning.

When Danish politicians budget for the green solutions of the future, 750 millions DKK is set aside in 2021 to four different green missions of research, all focusing on technology as solutions and within the field of nature science.8 These solutions depend on human thinking and good reasoning, to lead in the right direction through green technology, implying that the human is above and mastering nature. Paradoxically, it is this very view upon nature, as for humans to master, that is part of the problem leading to the climate crisis. It is not only this paradox in thinking of solutions, but also the fact that in engaging the general public, emotions/feelings are just as important as rationality. This points to the fact, that the struggles of developing a sustainable society is calling for more than nature-scientific solutions, including cultural and emotional aspects of living in the crisis of a damaged earth.9

In continuation of this and when questioning the (Western) human way of thinking and behaving, that caused this crisis, it is apparent to investigate the human view on nature. How does human perceive and connect with nature and how did this perception develop?

The idea of human as essentially different from what humans perceive as nature, has developed from a long Western historical process of increasingly perceiving nature as non-living and unfamiliar. Events throughout history has facilitated different human views on nature and these can be divided into four periods.¹⁰

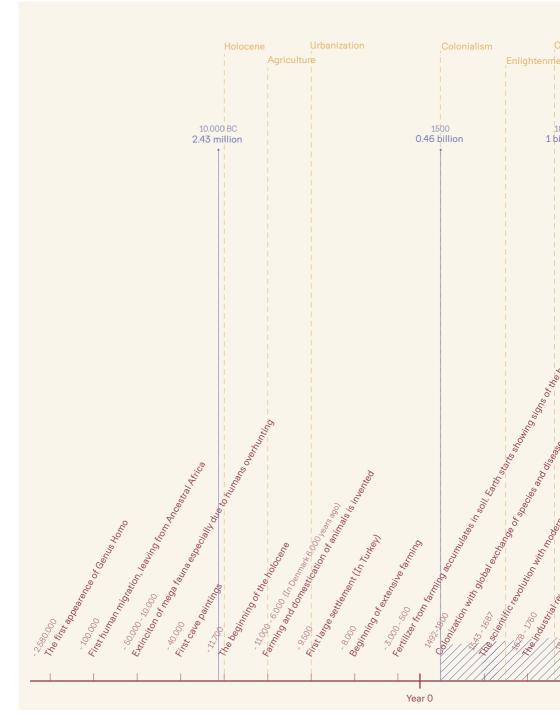
- The mythical period of human and nature as a unity. Nature was perceived as living, animated and as kinship to humans.
- *The ancient period* with nature as the ideal. A supreme and complete thing perceived as living but without the mythical aspects in favor of a conceptual thinking, that separates humans and the human soul from the physical world.
- *The middle ages* with an ambivalent perception of nature as God's creation but as inferior to humans. Characterized by Christianity, nature is seen as an example of the power of God.
- The modernization's objectification of nature empties the mythical, spiritual and religious significance. Nature is subject to empirical research, technological mastery and recreational consumption. The idea of nature as object for transformation



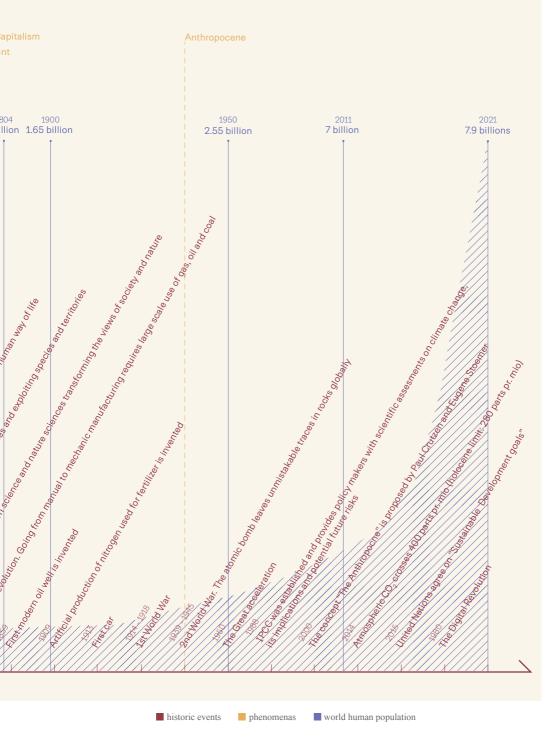
6. Landscape of agriculture *photo: Ulla Birk*



7. Preserved landscape, National park Thy $photo: Joe\ Wolf$



8. Timeline of history toward the anthropocene graphic: by author



is extended to meet the endless desires of modern human consumption and capitalism's demand for progress and profit.¹¹

The modern perception of nature and the hyper-separation of human and nature, more-than-human, restrain the capacity of human to respond to the climate crisis. "Humankind loses the ability to emphathize and see the non-human sphere in ethical terms" Human supremacy of nature leads to injustice between species and territories, "causing catastrophic changes on a planetary scale" and a new philosophy of nature is needed: "We will go onwards in a different mode of humanity or not at all." 14

The anthropocene

The human influence and disturbance on earth is now so profound that it outranks other geological forces, leading geologists to name the current era as the *anthropocene* - the age of humans. This era has caused a physical geological layer in the many layers of the Earth's surface. This layer will exists in millions of years from now as a trail of our way of living.¹⁵

The theoretician Donna Haraway proposes to add the concepts the *plantationocene* and the *capitalocene* when talking about the anthropocene. The plantationocene describes the processes of making wealth through radical simplification through colonialism, slavery, heteronormative familialism, global transportation of all kinds of life and through forced systems of production and reproduction leading to the capitalocene. Both concepts contribute to the understanding of the anthropocene as not only a geological layer of the earth's surface, but an era where times and places for human and more-than-human refuges are being destroyed by humans. This is not caused by humankind everywhere and at all times, but specifically humans situated in the capitalocene, anthropocene and plantationocene.¹⁶

The anthropocene is not a result of the human species but by humans after modern capitalism. The modern human conceit and the aspiration of progress leads to ecologies and landscapes being destructed. This segregates, alienates and turns humans and other beings into resources disturbing the base of collaborative survival. This happens in the idea of *scalability*, the anthropocene way of planning for progress, where projects can expand without changing the framing premises. Land is seen as a scalable project for capital and is convertible at market values, which is the idea behind the colonial plantation e.g.¹⁷ Because of this, humans has become a force with the power and ability to decide things as where forrest gets to grow and how many animals get to live and die. "*No part of this planet is untouched by human influence*" We have had the power to heat up the planet and we have caused ice to melt, islands to disappear, etc. The climate crisis is both a local, planetary and systemic matter but does not affect all beings equally.

Anna Tsing criticizes the anthropocene for neglecting collaborative survival by blocking attention towards "patchy land-scapes, multiple temporalities and shifting assemblages of humans and non-humans" and states that "staying alive - for every species - requires livable collaborations" 20. She states that it is fundamental to acknowledge, that human does not act alone and there are many ways in which more-than-humans announce their specific agencies.

The Anthropocene and planning

In the discipline of urban planning, there has been a history of understanding cities as separated from nature, which has roots in a human exceptionalists understanding. D. Houston et. al points towards urbanization as an anthropocene problem when planning with nature, stating that it is not only a problem of how we plan nature in the city but "the urbanization of nature itself."

The city is traditionally seen as the physical space of the "enlightened human value and technological mastery" and is risen above nature. It does not consider both humans and more-than-humans as actors constructing and inhabiting the urban



9. Landscape of The Anthropocene photo: Edward Burtynsky



10. Landscape of The Anthropocene *photo: Edward Burtynsky*



11. Make kin, not babies! slogan sticker for DUMP! exhibiton at Kunsthal Aarhus by: Donna Haraway and Elain Gan

space collaboratively. This is causing the space and the stories of the city to be dominated by the human idea of progress²³. The planning agenda of land use is governed by the profit of change in landscape and with infrastructure to facilitate human development, growth and progress. This agenda is assuming that there will always be new territories of capital to use and connect to via infrastructure - an understanding of *connectivity* only for human and urban growth, without considering the more-than-human.²⁴

In the context of climate crisis, the anthropocentric view fosters urban planning to tend to a focus on adaptation and mitigation from the view of "risk, vulnerability and resilience"²⁵. Trying to minimize the "impacts on the economic and social functioning of cities"²⁶, is at the same time, paradoxically, the institutional structures which prevent for efficient climate action.²⁷

The city is a place where the hyper-separation of humans and more-than-human is clearly expressed. The management of the more-than-human, for instance when animals or vegetations are removed when disturbing the usual live of the city, is the cause of hyper-seperation and the ignoring of *interspecies entanglements*^{28,29} The discipline of planning has been minimally interested in considering more-than-humans as co-participants in producing and planning urban space.³⁰ "*To see them we must reorient our attention*"³¹. With this quote Anna Tsing points to the fact that there are still existing world-making pre-industrial livelihoods, who has been neglected because they do not fit the view of progress, but possible to learn from, "how to look around rather than ahead"³². The modern human conceit³³ and human exceptionalism³⁴ is not the only way of planning worlds.³⁵ D. Houston et. al argues, that the crisis of the anthropocene force planners to consider planning from a more-than-human view and create methods appropriate for "how humans are shaped by, and intervene in, more-than-human worlds"³⁶.

The chthulucene

Considering the climate crisis, the consequences of the anthropocene, Donna Haraway believes that it is about making the anthropocene as short and thin as possible - referring to the anthropocene as a period of time but also the geological layer of the earths surface. She proposes a new word, *chthulucene*, describing this time as staying with the struggles of living on a damaged earth by learning how to enable "collaborative work with other terrains with multispecies assemblages including people" 37.

The chtuhulucene is the time/era for processes where all human and more-than-human come together and gather forces to resist and restrain the anthropocene, the plantationocene and the capitalocene. Humans are not of particular high status in this world of struggle and Donna Haraway suggest a chthulucene slogan assembling humans and more-than-humans - "Make kin, not Babies!" [18] (kin understood as other than biogenetical kinships). The slogan points to the necessity of environmental and reproductive justice for all species. Here reproduction is not linked to a modern human conceit of value defined by a growth that so far has lead to double death and double birth [18] - concepts defined as the extinctions of all kinds of human and more-than-human species, referred to as the missing [40], and the desire to reproduce humans and more-than-humans, referred to as the born [41]. Interspecies reproductive justice happens when humans and more-than-humans collaborate in making other worlds possible.

Imagining an alternative world without double death and double birth is a feministic matter and "making and recognizing kin is perhaps the hardest and most urgent part" ¹⁴². In a feminist view kin does not have to be tied to genetics but can happen across gender, class, nation, race etc. Therefore, feministic initiative in imagination, action and theory, to break down the ties between kin and genealogy, and kin and species, is essential for achieving justice for all species.

Donna Haraway points to the fact that there is already existing worlds with practices creating possible worlds and knowing about making kin and making connections in and between worlds. Those are the practices existing despite colonialism and



12. "Bæreposen", logo for newsletter Jordbo, by Emmy Laura Perez Fjalland $Graphics\colon Føljeton$



13. Inuit family in 1917 *Photo: George R. King*



"Matsutake is loved as a marker of the autumn season. The smell evokes sadness in the loss of summer's easy riches, but it also calls up the sharp intensity and heightened sensibilities of autumn." - Anna Tsing photo: iStock by Getty Images

capitalism. One world-making practice is that of the inuits. *Sila* is the inuits concept of all life of air and earth. For the inuit it is a crucial way of knowing nature culturally, practically and spiritually and creates possibilities for the inuit of making world despite a changing climate.⁴³ In this and similar pre-industrial/-colonial/-capitalistic livelihoods, knowledge is wealth and *story-telling* is a crucial part of the practice.

Creating worlds through story-telling is a part of making kinship and is necessary when being able to imagine and get to know, what to do in the struggles of living on a damaged earth. The American writer Ursula K. Le Guin explores the importance of the story as ways "to pick up divers things of meaning and value and gather them together, like a forager" In continuation of this idea of storytelling, Anna Tsing is suggesting story-telling as a method to learn embracing different realities, to be able to rethink connections and other ways, for collaborative survival in the climatic crisis of the anthropocene. This is explored through various stories of the mushroom matsutake and the livelihoods connected to.

To stay alive requires livable collaborations involving others, and is thereby subject to unpredictable transformations. Assemblage is a concept used to describe this process of interspecies encounters, entangling different ways of being, which indeterminately transform the involved. In these transformations we learn collaborative survival and that is where kins are made too - recognizing kinships is to be aware, that when conditions of one changes, it is coherent with changes in the conditions of the world.⁴⁶

The matsutake mushroom is a way of telling the story of collaborative survival. Anna Tsing categorizes matsutake as *third nature*⁴⁷, the nature that manages to live despite capitalism. Matsutake is a popular demanded Japanese mushroom, that can not be cultivated and therefor cannot be part of the industrial and capitalistic landscape of scalability and progress.⁴⁸ Without alienation it is not possible for scalability and the matsutake rely on transformative relations with other species - it is nourished by the host tree and provides the tree with fertile hummus.⁴⁹ Matsutake depends on (the ruins of) scalability, for it lives in the soil in the remains of industrial production forest. Hence the matsutake becomes a symbol of the possibility of life created by transformative encounters.

Another type of encounter described through the Matsutake, is through the smell of the mushroom. Through the history and memories tied to the smell, it becomes an assemblage of different ways of being and the encounter is entangled in thoughts of nostalgia and possibilities. Anna Tsing states that such sensibilities are needed in this time of imaginative challenge, when groping towards collaborative survival.

Planning and the chthulucene

The consequences of the anthropocene have put planners into new situations, necessarily questioning and moving away from the anthropocentric perspective on planning. The scale of the climate crisis is creating a new we, including all life affected, and leads planners to think of how to plan in more-than-human ways and face the challenge of collaborative survival.⁵¹

The methodology when striving for this, needs to make up with the hyper-separation, the binary thinking of conscious and acting human as opposed to unconscious and passive others. Instead it is needed to think *connection* as the response to hyper-separation. J. K. Gibson-Graham suggests two ethical projects involved when thinking connection - connecting with the more-than-human actively, rather than only seeing connection, and thinking connection as *vital materialism*⁵³, that human and more-than-human are different collections but of the same material. These two projects construct to types of belongings, belonging to the world and belonging within ethics bringing human closer to the more-than-human.⁵⁴

Houston et al. also points towards connectivity thinking⁵⁵ and that planning beyond the anthropocene requires a set of ethics for entanglement, because the discipline of planning itself is human-centered and consist of human decision makers only. This requires to reposition the more-than-human in terms of ethics and to reposition human in terms of ecology. To be able to imagine alternatives decentering human exceptionalism, it is inevitable to experiment with ways of becoming-with⁵⁶ and becoming-world⁵⁷. The acknowledgement of becoming-world, facilitates a human recognition of the role of more-thanhumans in planning and become-with, making kin, when relinquishing the human position of dominance. Making kin is to be able to consider the wellbeing of others, and when planning this sometimes calls for the ethics of leaving be^{59} . Becoming-with contribute to ethical encounters with more-than-human, where differences becomes points of encounter rather than points of exclusion or consumption, challenging human planners to consider all kinds of more-than-human including stuff as geologies, waters and air. 60 Acknowledging becoming-world assigns human planners with the responsibility of developing new tools for planning in the entanglement with more-than-humans. Houston et al. points to the fact that there are examples of societies who has tools for doing this and who demonstrate ways of becoming-world with human and more-than-human symbiosis. 61 Human planners are moving in trackless territories 62, a field without any tools or guide on how to plan and act in the world of interspecies entanglements.

J. K. Gibson-Graham suggest an antidote field guide⁶³ as a methodological starting point. That is a "collective of concern around a vital materiality - the region"64 deriving from regional profiling, research and mappings, triggering human planners into a process of more-than-human planning. The antidote field guide identifies appearing habitats, evolves new lexicons and investigate landscapes of possible sustainable growth through the view of other species. And by working with humans in place, questioning the elements of the entanglements, that human is part of, to act out new ways of living.⁶⁵

The regional profiling consists of data from local knowledge and includes all the coexisting geological and ecological systems of the region. When collecting the data from local knowledge, it is of importance to invite indigenous people of the landscape to explain the meaning of the landscape as a place of stories. Mapping is also part of the regional profiling used as a method of gathering data and collective knowledge inviting new ways of belonging/becoming. The regional profiling is a way to recognize the human planners entanglements in life and death, materiality and vitality both limiting and enabling planning. This requires human planners to come up with creative ways inviting humans and more-than-humans in a relationship, without dominance, exploring reciprocity and interdependency.⁶⁶ It is necessary for human planners to critically consider who is speaking for the more-than-human when making space. When is the more-than-human speaking for themselves and how?67

Housten et al. also points to developing modes of intellectual inquiry⁶⁸ as a starting point for a new planning methodology. This is to question the indistinct systems of human exceptionalism in planning, by investigating how more-than-humans is captivated and reshaped in the conflicting desires of planning.⁶⁹ It is also needed to question what types of relationships and life the human and more-than-human are concerned of and how planning can respect and possibly facilitate this. 70

Houston et al. propose a motto, inspired by Donna Haraway, for human planners to engage in these times of struggles of living and planning in a climate crisis - "Make kin, not cities!" Engaging with the more-than-human in methods of planning through an antidote field guide, is a step in the direction of moving beyond the anthropocene. 72 The aim of developing a new methodology is the possibilities to decolonize space to make queer alliances between biodiverse societies and interspecies justice.73



15. Preperations for witch circle, Skagen *Photo: Maja Dichmann*

Case studies

This written thesis include two case studies of space-making practices considering the more-than-human and concerned about the (dis)connection between human and nature. Firstly the practice of the contemporary witch, that makes space for other ways of everyday life in connection with the more-than-human. Secondly the practice of curating in public city/landscape and making space while dealing with questions of collaborative survival.

"Heksens Håndbog" - the practice of the contemporary witch

The first case study of this paper is based on the book "The witch's handbook" Dannie Druehyld (1947-2021), who was the only officially registered witch in Denmark. She is a writer, environmentalist, lecturer and has been practicing witchcraft in the forest of Rold Skov throughout her life. The book is a literary work inviting people into the practice of the contemporary witch. It is an introduction to a type of world-making which creates space socially, culturally, spiritually and pragmatically, of interspecies entanglements and collaborative survival. The case study will focus on witchcraft as a methodology/practice and how it unfolds spatially. The book is organized around four main chapters, dividing the practice into four aspects

The life of the witch

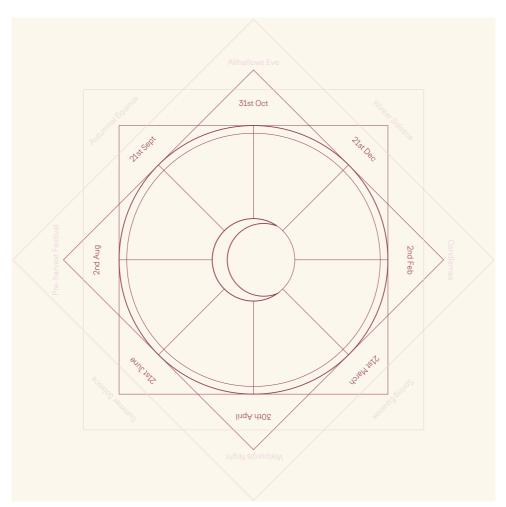
The witch's calendar

Witch-cyprianus75

Magical herbs

The life of the witch is cyclic. It insists on harmony in every relation and interaction and insists on the love that gather all life with the wish of peaceful survival. The witch is aware of the anthropocene condition of the world, where species and worlds are destroyed and the witch chooses to aspire in the opposite direction, stating that each human have a choice and a responsibility for the surroundings. The witch lives as a part of the nature, hears when the earth is calling and lives for all lives, love and hope - a perception of nature equivalent with the mythical period's⁷⁶. Using the concepts of Anna Tsing and Donna Haraway - the practice of the witch seeks collaborative survival and it is in the indeterminate transformations, made in interspecies entanglements and assemblages, that kinship and in terms of witchcraft magic emerge.

Magic emerge in connection with more-than-human. Through different methods and with different tools the witch creates space for magic. Nature itself is the most significant tool for the witch - "everything that is to be sensed, lived and felt, lets forces sink deep into you and paints your soul with images you can always find". The witch's practical tools are also pragmatic ones, such as the broom that is used to mark a space by cleaning - marking your own space or the space for a ritual/



16. The witch's calendar *Graphics: by author*



17. Dannie Druehyld *Photo: Tine Sletting*



18. Alter of the witch Dittekarina *Photo: Amanda Luna Holm*

gathering e.g. Other practical tools are a.o. amulets, ribbons, knifes, colors, water, light and all sorts of containers and carrier bags.

In the witch practice there are goddesses. They are used to be able to talk about and relate to nature, emotions and forces. They contribute with feelings of hope for possible changes and protection, cause despite the changing conditions of the world a goddess survive. Through interspecies entanglements the witch is related to the goddesses and one could argue, that the goddesses is the connection or entanglement itself.⁷⁸

Witch circles are rituals where goddesses are summoned, or rather the witches becomes the embodiment of the goddesses, and everythings connectedness is celebrated. It is a collective ritual where a contemporary and social space is made.

Different preparations are done according to what kind of celebration the witch circle is for. It is a festive gathering and can be filled with singing, dancing, games, food and drinks. The circle is in its simplicity feeling the connectedness and kinship, when giving and receiving to each other in the circle or others outside of the circle. It is a physical space stating that "together we are strong" playfully and with hope pointing to the power of collaborative survival.

Another space that physically states the witch's connection with nature is the alter. The alter is a personal and intimate space of peace and filled with memories and things that is of deep value to the owner. It changes according to season, emotions and needs and is used as a space for reflection. It is decorated with flowers and herbs and is done so according to which goddesses, energies or emotions the witch wants to be in particular contact with at the time and is therefore also a space that contains a lot of hope.

The witch calendar, the cyprianus and magical herbs are also important tools to the witch. It is through the witch's connection with nature that the patterns of time is recognized as a never ending cyclic process - seasons change, moon phases change and the sunlight comes and goes. The witch calendar is shaped by this understanding and contains specific days of celebrating each shift that marks humans, more-than-humans and the entire earths connectedness and dependence in the universe. The witch lives in close relation to the patterns of time and the calendar contains knowledge about what each phase/month/weekday of the year brings and how this can be put to use in the practice (of collaborative survival and magic).

The witch-cyprianus, is a book of magic scripts written down and passed on from one generation to another. It is a collective piece of knowledge and contains advice, recipes, directions and other beneficial things when living. This book is fundamental in the practice and culture of the witch, cause it combines the practical and physical knowledge with the spiritual, social and cultural aspects. Because the witch is entangled in cultural, social and spiritual webs with nature, it allows a deeply rooted connection and an understanding which goes beyond the anthropocentric (and also scientific) knowledge. An example is the records of magical herbs where the botanical knowledge of each herb is complimented with cultural, social or spiritual knowledge. Because of those other types of potentials entangled with the herbs they are listed as magical herbs.

"Hummings" - A curators practice of making space

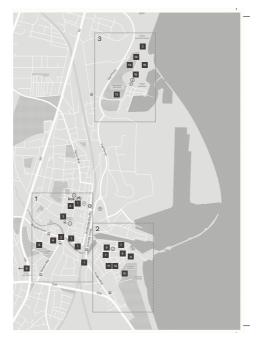
The second case study in this paper is the exhibition "Hummings", running in the period from the 14th of august to the 26th of September 2021, and the first of a series of exhibitions in the land- and cityscape of Køge. The exhibition is a collaboration between KØS - *museum of art in public space* and the municipality of Køge.

The title of the exhibition, *Hummings*, is referring to an undefined pre-language of indistinctive sounds and as a possible language of entanglements between humans and more-than-humans, enabling ways to think of relationships/kins across species. Hummings, inspired by Anna Tsing a.o., aspire to give voice to the invisible, vulnerable, unnoticed or repressed in order for collaborative survival.

It is not only thematics that makes Hummings a relevant case study to this paper, but also the general aim of the exhibition, which is to "expand the curatorial scope and agenda"81, creating needed discussions and reaching a diverse public. This is achieved through research from different disciplines of sciences and in intersection with contemporary art. Curating is a practice of making space and in many ways a discipline for planners to relate to, especially curating in public spaces. The aim of the exhibition and the way of combining different sciences, breaking down binary ideas, is relevant for the discipline of planning to investigate, enabling a chuthulucene way of planning. It is also necessary for planners to expand the scope and agenda⁸² of planning by creating discussions with a diverse audience.

The exhibition consists of a variety of artworks, across scales and medias, contributed by sixteen individual artists. These artworks are placed around Køge, connected by a proposed route engaging the surrounding different typologies of land- and cityscape. The catalogue becomes a significant part of the curating of the exhibition. In the catalogue is a map with the route, guiding you through the public space from one artwork to another. With the information connected to the artwork, the map leads you from place to place with different views, not only on the exhibition, but also the space around you. Because of the great distances between artworks and the artworks questioning the world it is surrounded by, it invites you and give you the time to reflect (alone or together) on the way.

It varies how the artworks relate to the thematics and the surroundings. Some are introverted, and some are extroverted and some becomes part of the surroundings while others contrasts themselves from the surroundings. "Other projects think around the issues of urban development and demography in Køge, humming for new way of experiencing and living in the city"83. This case study showcase a few examples of the artwork and their interaction with public space.



19. Map of the exhibition "Hummings", page 10 of catalogue guide Graphics: Seán Donohoe



20. "Transformer", sculpture by Lea Gulditte

Lea Gulditte Hestelund made three stone sculptures, The unnamed by the church in old city center, The keeper by the roundabout at Blegdammen just outside the old city center and Transformer lying in the sand at Køge beach. The three sculptures are almost unnoticed blended into the surrounding context. The keeper and the unnamed interact and integrate with the setting by simulating other natural stones used as roadblocks, boarder markers or decoration in urban space, a nod to how we take stones from their usual context, disrupting their entanglements with other species. When taking a closer look, or walking around the sculptures, an unknown and uncanny world is revealed, making the stones come alive to some extent and leaving the viewer with associations of different lives within nature, crossing time and reality. Because of the sculptures very subtle and hidden sign of another possible life/world making of the stone, it seems intimidating for the viewer which is then obliged to react/reflect. The same can be said with the sculpture Transformer by the beach, but instead of simulating the context of traditions for natural stones in urban space, it simulates nature by lying in the sand in the shadow of a bush in the shape of some creature both unfamiliar and familiar - an indeterminate and fluid fusion of corporealities. This method of applying something unfamiliar and somehow beyond this world, in a subtle way, and in well known formats and contexts, has a strong impact when making the viewer wonder and reflect on what is alive in this world.

Photo: by author



21. "Mimicking the birds mimicking the waves" by Madder López

Located in a warehouse next to Køge Vandværk, is the performative action and video work by Madder López. The artwork does not at all respond to the immediate surrounding context of public space, but is cut off from this in the dark space of the warehouse, while opening up to a whole other type of space, the coast. A video of a group of people running back and forth, following the movements of the waves, mimicking the live of bird sanderling when searching for food. This is a comment on the human (lack of) ability to collectively follow the movements of nature as other more-than-human species are able to/depending on. It almost looks hilarious, when the people are running back and forth, making the viewer consider the irony of our obsession with controlling nature and one almost get embarrassed of the lack of instinctive and natural/immediate connection between human and nature, when reminded of the times where human naturally followed the rhythms and cycles of nature and collective communities.

Photo: by author



22. "Vandhaven" by Christoph Schäfer

At Køge beach a couple of what looks like information signs at a site of construction is placed around blocking the seemingly never ending view of the open space landscape. They are an artwork by Christoph Schäfer and pictures scenarios of an imaginative waterpark, inspired by Køges circulating dreams of planning a waterpark directly by the sea, associated with the hedonistic ideas of the 80's, where everything was possible and the resources of the planet limitless. The combination of the imaginary and poetic imageries, shown on construction-sign like billboards in a landscape of possible construction, create a link between urban planning and imagination.

Photo: by author

Engaging with the question of this written thesis: How can planning, in a Danish context, evolve in a more-than-human way, in a time with a need to create space and opportunities for interspecies entanglements and collaborative survival, wherein culture and nature merge for humans to connect with nature in a way that moves beyond the anthropocene? poses new questions and considerations. Could planning, as a discipline of both nature and human science, foster a new view of nature, moving beyond the anthropocene, as a starting point for new aspects on climate action? A cultural and social engagement with climate crisis? For planners to be chthulucene front runners when making space for collaborative survival and interspecies entanglements, a new methodology within planning is needed. For planners living in the times of the anthropocene, to constantly be aware of this systemic bias enabling inclusion of more-than-human, calls for at set of ethics or a book of guidelines. This methodology could take its starting point in Donna Haraway's theory of the chthulucene and Anna Tsing's idea of collaborative survival.

J. K. Gibson-Graham and Houston et. al. argues, that planners has a responsibility to go in the direction of collaborative survival, moving beyond the anthropocene into the chtuhulucene. An antidote field guide is proposed - containing a collective gathering of knowledge that draws on different sciences, disciplines and local knowledge. The interdisciplinary processes of planning are crucial when considering the more-than-human and when/how it speaks for itself. Since planning is a human discipline, new ethics and an antidote field guide seems necessary, to be able to include and concern more-than-humans. But are humans able to extend solidarity to the more-than-human? Can planning unfold the ethical connections between humans and more-than-humans? And how will this methodology unfold physically?

Just as the theory of the chtuhlucene and collaborative survival could be the starting point for another way of perceiving nature and a new methodology for planning, so could the practice of the contemporary witch. Both Donna Haraway and Anna Tsing points to the fact, that there are still pre-industrial/-colonial/-capitalistic livelihoods living with nature in another way than the modern human. The witch is one of those. The witch is entangled with these theories in every aspect of living. The witch carries many stories and knowledges about nature and is in many ways the carrier of our nature-remembrance, learned and experienced from generation to generation. The witch has known and talked about the climate crisis for decades - experiencing species that used to flourish disappearing, fewer animals, change of weather and fewer birds singing. How can planners learn from the witch? One could even question the necessity of the theories, when the knowledge is already unfolding in some human way of making worlds. To live like a witch is one thing, but to plan like a witch is another, wherein the theories could become important translators from an individual way of living to a method of planning. Could the planners

antidote field guide be the translation of the witch's cyprianus - a carrier bag of knowledge?

The exhibition Hummings seek to investigate and create a physical space from the theoretical view on collaborative survival. Though it is unfolded in the different scapes of Køge and engage a wide public in these thematics, philosophically and physically, it is more of a prototype creating awareness than an example of a space-making methodology of collaborative survival. That is also because of the fact that it is not a planning project. But as a spatial investigation in public space it is dealing with some of the same thematics and has potential to contribute to the expansion of the planners toolbox. In the same way as the Danish pavilion Connectedness, is not a planning project, but an architectural experiment (investigating the question of the seventeenth architecture biennale in Venice "How will we live together?") it is rather an important step on the way in being able to imagine how to make space and plan for collaborative survival. So how do we use these as a catalyst for a new way of planning? Architecture and curating are disciplines of making space, both physically and psychologically, but is it able to create a language between human and nature/more-than-human? Could planning be the humming language of the interspecies entanglements by enabling cross-species kinships? A space where nature, culture, reality, fiction, science and religion merges to create meaningful collaborations across species in the struggles of living on a damaged earth? Such planning processes and methodologies pose questions of uncertainty and scales of time. As Anna Tsing states, interspecies entanglements causes indeterminate transformations of the ones involved. How will planning engage with this uncertainty and the other ways of long-term-planning this fosters?

Will planning, as a human discipline and with only human decision makers, always be an anthropocentric discipline?

Obviously the climate crisis calls for rethinking the human existence and since planning is the discipline, creating the space and structures of that, we have to challenge the disciplines anthropocentric methodologies. It is tough and devastating to deal with and maybe it is beneficial to learn from the witch's practice at least for the sake of the hope it possess.



23. Detail from the Danish pavillion, "Connectedness", at the 17th Venice Bienal $Photo: Hampus\ Berndtson$

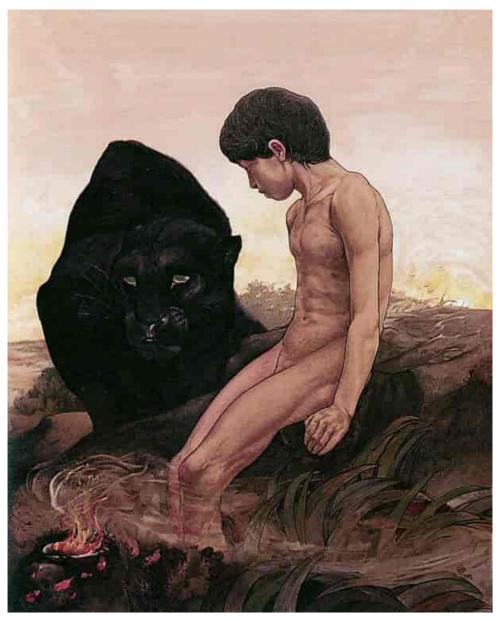
Conclusion

The climate crisis demands every discipline to rethink its role in the anthropocene era and question how its anthropocentric way of being affects the climate in order to enable new sustainable methodologies. Planning in particular is obliged to do so, since it is the discipline of creating the space wherein all kinds of lives unfold. Planning affects the everyday life, socially and individually, creating the settings of interactions every species in-between.

It is apparent that the discipline of planning in a time of climate crisis needs an expansion of its toolbox when moving away from the anthropocene to deal with the consequences it has caused. When planning in the chthulucene and for collaborative survival an antidote field guide or a cyprianus as concept describing a new planning methodology consisting of cross disciplined knowledge and local knowledge and stories can be of use. The concept of the cyprianus has an aspect of time to it, as it is a collective of knowledge passed from generation to generation and so a new methodology consists of knowledge from the past and present and changes and accumulate over time.

Planning has always been a discipline of different sciences in combination with other disciplines. In the time of climate crisis an interdisciplinary approach is even more crucial, in being able to consider all kind of live affected/involved in planning and making space for interspecies entanglements, kinships and justice.

A new chthulucene methodology of moving beyond the anthropocene when planning, will open up new agencies and other types of collaborations. It also consists of an uncertainty when collaborating/entangled with more-than-human and this calls for new aspects of planning over time. This is where the concept of the cyprianus as an accumulation of collective interdisciplinary knowledge over time could be apart of the planners expanded toolbox. One could also imagine the other parts of the witch practice, the witch tools, calendar and list of herbs as important tools for planners when using the methodology of the cyprianus/antidote field guide to move beyond the anthropocene investigating the context of both place and time.



24. Illustration of Mowgli and Bagheera, Jungle Book 1908

Drawing: Edward and Maurice Detmold

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