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Rebellious Waste & Food

*Searching for reparative futures
within urban-rural landscapes*

Emmy Laura Perez Fjalland



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Rebellious Waste & Food:
Searching for reparative futures within urban-rural landscapes

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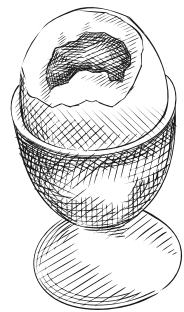
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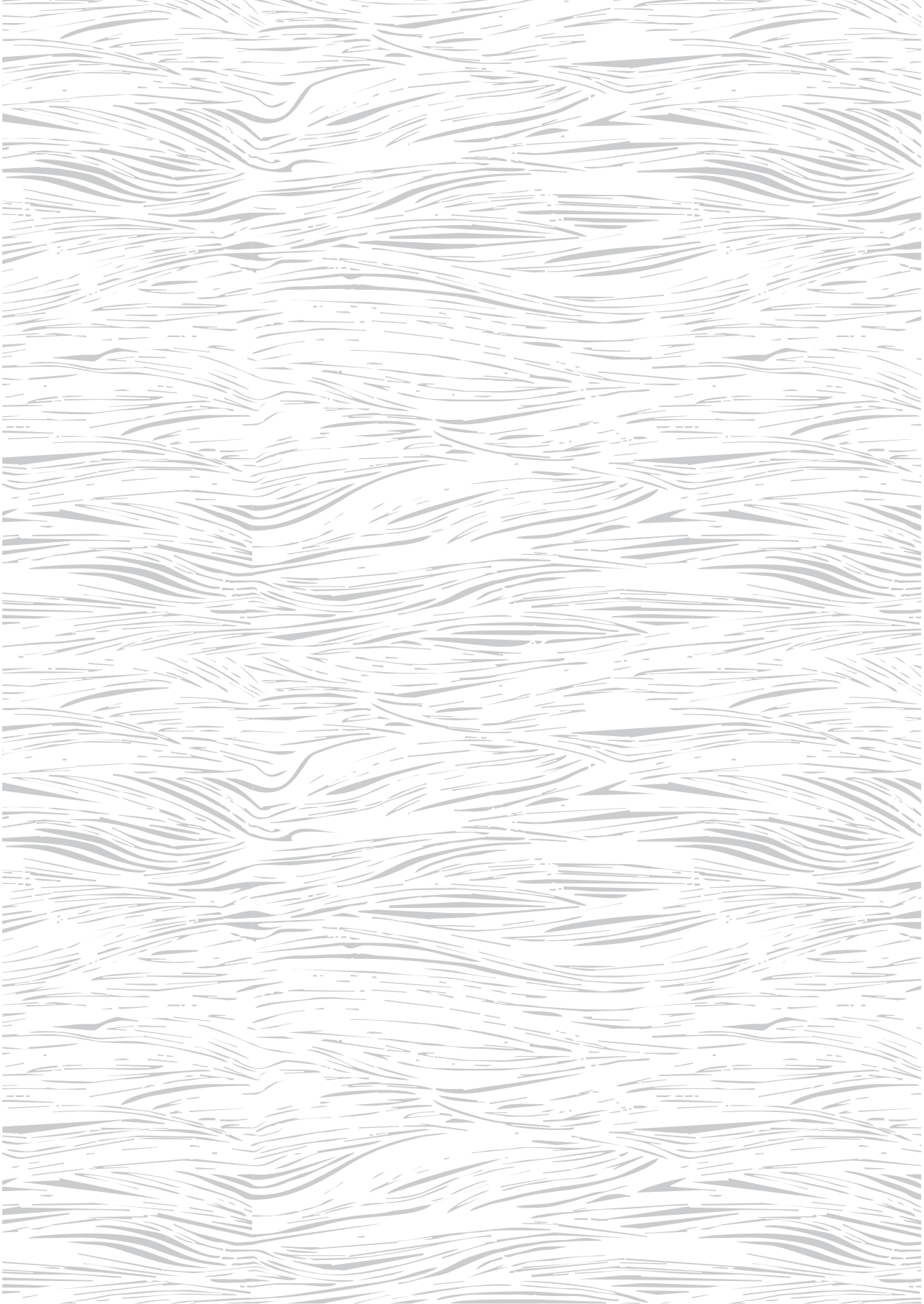


ABSTRACT

It is most important to acknowledge the tragedy of the anthropocentric influences and practices that fundamentally change this planet's landscapes, ecologies and atmospheres that make life as we currently know it possible. While it is questionable if we are able to repair the environmental and ecological damages that human actions are responsible for, I find it crucial not to get paralysed by the apocalyptic tales because this seems to block our mind and imagination. This study explores the spaces and practices that invite for responses to environmental change and is doing so by studying actors that *practice* alternative human-nature world-making with food production and waste management. The study has been attentive to small gaps of possible livable worlding and the sprouting, germinating and fertile practices, and explores what we might learn from those who try to imagine, think, write, and build alternatives. The guiding research question explores *how practices with waste and food cultivate response-abilities that inspire for reparative futures within urban-rural landscapes?* The empirical context is made of studies in relation to a Danish project called 'Sharing City: Can we share our way to better cities and local communities?', the small-scale farm Hegnsholt in Lejre run by Johanne Schimming, and Lejre Municipality through the perspectives of the Program Manager for Food, Business and Sustainability, Tina Unger. The empirical contexts have been studied and analysed interdisciplinary and eclectively by using ethnographic and interactive methods. Theoretically, I have eclectively pulled different disciplinary theories, concepts, thoughts, experiences, and practices into a bag of research (inspired by Ursula K Le Guin's 'Carrier Bag Theory of Fiction' (1986)). In this study, stories are considered as inevitable world-making practices that hold transformative gestures that can spur cultural and multispecies imagination. The languages for and stories about the reparative, cyclical, cacophonous, fertile, and composting practices are always becoming, never-ending.



We seem to need, to learn, to notice stories and storytelling practices that goes beyond the modern, structural, linear narratives alert to dualisms, climax and revelations. My work with the Carrier Bag Theory as scientific storytelling is an attempt of exploring other stories and storytelling practices. This study suggests that abilities to respond to environmental change is cultivated from critical, tactile, somatic, and situated sensitive multispecies meetings, practices and places. A situated kind of knowledge that is very different from the distanced, techno-scientific knowledge and communication that currently permeates environmental and climate debates. This study depicts a human-nature practice of world-making that seeks to preserve and cultivate multispecies circularity, collaboration, and contamination.



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1.
Rebellious
waste & food



Throughout the summer of 2018, Europe has experienced extreme heat waves and wildfires and, on top of this, report after report seems to ‘scream’ politicians and world leaders to action. Scientists within these fields seem to agree that changes are already taking place and that these changes will become more frequent and more intense (Chakrabarty 2009; Oreskes 2004; Virilio 2012). Furthermore, it seems there is a common agreement within the scientific community that human actions influence these change of landscapes, atmosphere and biospheres to a great extent, and transform the very conditions that make life on the planet possible for humans (Crutzen and Stoermer 2000; Haraway et al. 2016; Tsing et al. 2017). However, what should be done, who should do it, and at what “expense” is constantly being questioned and debated. These are considerations that, roughly speaking, highlight ongoing conflicts between ‘ecology’, ‘technology’, and ‘economy’ (Beck 2010; Davis 2010; Giddens 2009; Hajer 1995; Ingold 2000; Sachs 2009; Shiva 2016; Urry 2011). As Gan et al. wrote, “The hubris of conquerors and corporations makes it uncertain what we can bequeath to our next generations, human and not human. The enormity of our dilemma leaves scientists, writers, artists, and scholars in shock” (2017:1). Not to mention activists and citizens. And what shall we do with this shock? Where shall we go?

On 11th May 2018, 301 Danish researchers from many different fields signed an open letter to the national newspaper *Dagbladet Politiken*, calling for a more ambitious environmental agenda – a policy that needs to prioritize environmental concerns above economic growth (Lund et al. 2018). The following day, the Minister of Energy, Supply & Climate, Lars Chr. Lilleholt rejected and overruled the call with an argument stating that it is an absolute necessity that economic growth and green transition go hand in hand. “Economic growth and technological development are prerequisites in order for us to afford to respond to climate change” (cited in Jørgensen 2018, own translation). This example gives an impression of how much the debates of how to respond to environmental change are stuck in the same tracks of thinking and imagining. Before the response from the Minister, I was in contact with a friend and I asked what he thought about the call for action. As one who works hard to change practices and agendas, he was unimpressed by the letter from the 301 researchers. While he agreed with the critique and ambition, he found it a common critique that always seems to be unembodied and dislocated from local practices and places for doing. The story seems to get so big – systemic change – and abstract that we do not know where to start and the ability to respond seems distanced.

Every week my inbox and newsfeed are filled with headlines of insect extinction, water shortage, changing temperatures, intense weather phenomena, burnt land, plastic seas, dead soil, oil leaks, pesticide pollution, and so forth. I am deeply concerned. There are nights where I cannot sleep due to a ‘racing mind’, and there are days where I get so angry about this stupidity that I could move a mountain. I feel the paralyzing and depressing effects of the amounts of apocalyptic information and the immediate inactivity from the leading and powerful elite, and I am left perplexed and not knowing where and how to start the change. I have found that this frustration is named ‘climate anxiety’ and it is well-known within (climate) activist environments, but it is a growing societal phenomenon and in Norway and Sweden psychologists have embraced the issue (Kieffer 2016). The ecologies and landscapes that feed us are challenged by over-production, monocropping, and use of

chemicals, among other practices. The 'right' things to eat and purchase are up for constant reflection, wonder, and negotiation in terms of sustainability and health issues, and in my fieldnotes, I find reflections like: "I cannot stop thinking about everything that I put into my mouth; where does it come from, who made it, what are the ingredients, how were they grown, what about the workers?" (fieldnotes, September 2017) and "articles say that recent studies indicate that some pesticides increase brain-damage and leukaemia among children" (fieldnotes, July 2018).

To talk – mundanely and academically – about environmental change and ecological devastation is highly affected by an abstract, and yet very concrete, mechanical and instrumental language with atmospheric chemical components, statistics, models, scenarios, and prospecting. It is a language that seems to be distancing and that can leave its audiences, not participants, outside of the solutions and actions and therefore become immobilized, if not paralysed. Erik Swyngedouw (2010:218) argues that this language also results in "environmental apocalyptic imaginaries", where the future is always indefinitely postponed and yet just around the corner. The debates on how to respond to climate change become objectified, externalised, and paralysed, and he argues that "climate change has no positively embodied name or signifier. [...] The environmental problem does not posit a positive and named socio-environmental situation, an embodied vision, a desire that awaits realization, a fiction to be realized" (Swyngedouw 2010:224).

Swyngedouw consents that there is an urgent need for different stories and fictions about alternative socio-environmental futures (Swyngedouw 2010:228). In *The Great Derangement*, Amitav Ghosh writes "how the climate crisis is also a crisis of culture, and thus of the imagination" (2016:9–10). In this work, I want to ask how it is possible to spur the imagination of reparative practices, transformative gestures, and response-abilities? Ghosh (2016) and Mikulak (2013) moreover argue that the challenge of why contemporary culture finds it so hard to deal with climate change, toxic death zones, pollution, water degradation, ecological extinction is

partly caused by a technical, instrumental language, partly from the practices and assumptions that guide the arts and humanities.

This study has appeared in a space between the dystopic sense of losing ice caps, bees, dusky seaside sparrows, and the utopian sense of noticing sprouting weeds, of listening to hopes and ideas for how we also might live together in the future. I find it most important to acknowledge the tragedy of the anthropocentric influence and practices that fundamentally change this planet's landscapes, ecologies and atmospheres that make life as we currently know it possible (Gibson et al. 2015; Haraway 2016; Tsing et al. 2017). While it is questionable if we can repair the environmental and ecological damage of human actions, I find it crucial not to get paralysed by the apocalyptic tales, because this seems to block our minds and imaginations (Bennett 2001). And from this perspective, I wanted to explore how we can become able to respond to environmental change and have done so by studying actors that *do* (as an alternative to paralysis) something else. I have alerted to studying the small gaps of possible futures, the sprouting, germinating and fertile practices. Not to neglect the social and ecological destructive structures, but to study stories of possible alternative practices and what we might learn from those who try to imagine, think, write and build up alternatives. From both a theoretical and an empirical point of view, the fundamental concern and motivation behind this research is an attempt to try to open up the imagination by studying the stories and practices of people who are trying to do things differently and understand how they respond to environmental change.

The empirical work of my study started in relation to a Danish project called 'Sharing City: Can we share our way to better cities and local communities?' that was led by the Danish Architecture Centre that also co-funded this PhD-project. The Sharing City Project was a project that explored what sharing economy could look like in a Danish local context, using seven Danish municipalities and 24 sharing economy actors. In continuation of my interest in practices engaged with responding to environmental change, my attention was drawn into two of the actors

involved in the Sharing City Project. One was the Program Manager for food, business, and sustainability in Lejre Municipality, Tina Unger, and the other is the small-scale farm Hegnsholt in Lejre (around 45 kilometres from Copenhagen) owned and run by Johanne Schimming. These actors work with creating a more sustainable food-production system and practice, and I have been studying in what senses their practices could be environmentally 'reparative' and 'response-able'.

The farm mainly focuses on chickens and eggs and feeding the animals with so-called waste food from the Copenhagen restaurants and eateries to which Johanne delivers eggs and chickens, but this particular feeding practice is met with legislative restrictions due to the risk of contamination. This situation has made me try to understand the possibilities and ambiguities of human-nature relations practiced within the local situation. I wanted – as in the initial phases of the research project – and want – as in now – to visit those who are trying to do things differently, who try to change the direction towards ecologically response-able and reparative world-making-practices, those who practice alternative human-nature relations. I want to understand their stories, practices, places, and how they work and relate with the animals and 'natural' materials. Through this study, I am exploring a kind of rebellious practice with waste food and food production that encompasses mundane and slower processes, different from a more abrupt and volatile rebellion. The studied practices seeks to break-up conventional practices of what is considered possible and economically viable, and open up locked-in imaginations of what might be livable futures.

The food that is the focus of this study is expensive compared to similar industrially manufactured chickens and eggs; they connect with a kind of 'new Nordic food story' and seems to attract the green-creative-cultural-class. An immediate image of exclusivity might appear on the mind. The participating actors in this study are profoundly keen to rethink food production in environmental terms, and their (slow, quiet and tasty) activist practices are an essential part of making life meaningful – not only for themselves but also for future

generations. They work based on the conviction to minimize waste, cultivate food quality and ensure access to these kinds of foods for everyone, now and in the future. They also believe that we need to work to make food matter, matter as in beyond an alienated commodity, matter as a vital common and not a redundant mean, and matter as in how dishes are put together (e.g. eggs and chicken meat should not be eaten every day or make out the main meal). They, through this work, seek to suggest alternatives to linear economic thinking, industrial animal practices, global mobilities of food, and overproduction. With delicious storied food, they try to make us aware of the conditions and practices of food production, current and possible.

My background is in the humanities, and I am interested in what humanities can learn from the 'natural' world, such as chickens, eggs, and food waste. While food production and food systems are indeed anthropogenic practices, they involve multispecies collaboration, and it is currently a practice that leaves environmentally destructive traces within the landscapes humans live from and inhabit. This is a site and practice of relevance, and due to the urgency of the ecological crisis, it became my ambition to think along the Anthropos and the so-called natural worlds across disciplines.

This attention on human-nature entanglements is in this thesis performed at some expense with a focus on human-human relations; of such matters as class, gender, sex, culture, and ethnicity. I am not doing this to undermine the relevance or importance of these matters and issues in relation to our abilities to respond to environmental change. A potential immediate critique of this study could be for focusing on the 'palatable' and 'privileged', but I believe that if we search for reparative futures, our knowledge should *also* encompass the practices of those having the resources and privileges to explore and try out alternatives. In this study and text, I wish to bring attention to the practices *using* 'natural' matters, as I believe that the knowledge that can be learned from studying human-nature relations in this study's particular empirical context is an essential contribution to the knowledge of how we and Earth Others can *live beyond* the apocalyptic Anthropocene.

Research question

This work explores abilities to respond to environmental change by following the farm Hegsnholt and Lejre Municipality's practices with chickens, eggs, food waste and landscapes within Lejre and Copenhagen in Denmark. I have found the practices of the selected participants fruitful and fertile cases (Flyvbjerg 2006) to study, as their way of working and thinking around food production, and the exact closure of the exchange agreement presents and performs visible and tangible examples of relational entanglements of humans and more-than-humans. This study is based on combining qualitative ethnographic and interactive methods, and qualitative interviews, along with literature reviews, case-specific media and document studies over three years.

The study started with the Sharing City Project, which gave rise to the first ideas about alternative economies, urban-rural relations and vital matters such as waste and food, and furthermore, through this project I experienced locked-in imaginations; locked in economic growth rationalities and instrumental structural logic, and a too extensive focus on power and profits where everything else is easily left in the shadows. My intent to follow the work and perspectives of the participants with sympathy and curiosity, and from an embodied affective perspective is about trying to understand how their food production practices are storied, performed and spatially materialised, and how this might invoke alternative human-nature relations that might invite reparative and response-able practices. The recurring main research question is: *How do practices with waste and food within urban-rural landscapes cultivate nature-culture response-abilities that could enrich reparative futures?*

To explore this question, I have chosen three methodological grips: thinking with carrier bags, thinking with time-stretching, and working with other-than-narrative, and on the following pages I will elaborate these 'grips'. Also, I will further develop the reparative, response-able, transformative gestures and foodsheds as particular thematical attentions of this study. These will also be described in the following pages, and from that, I will unfold why I find

food and waste practices fertile abilities to respond to environmental change with. The chapter will close with some sub-questions to the recurring main research question in relation to the empirical context and lay out the storylines and chapters of the thesis.

Researching with carrier bags

This thesis is a writing of how I have electively pulled different disciplinary theories, concepts, thoughts, experiences, and practices into a bag of research (inspired by Ursula K. Le Guin's 'Carrier Bag Theory of Fiction' (1986)), how I have studied, sorted, kept or put them aside, while I have kept walking. I have been working along with the carrier bag idea, and in this section, I will elaborate on what I mean by this, why and how. This practice indicates one of the essential points of my work; that we must keep walking and trying out different solutions on the way. I have collected and put together different concepts, thoughts, and practices about human-nature entanglements while I have moved through the research project.

I have gone deeply and closely into a local, specific situation and practice with the farm Hegnsholt in the centre but asked what happens if I stretch out the time-perspective over thousands of years and histories to rethink current agricultural practices. Within social sciences and humanities, it is broadly argued that time-space-practices are accelerating and volatile, and while I work within a very particular place with particular practices, I am exploring what happens if I involve a sense of time that is kind of 'out of the moment'. Therefore, I involve long, historical stories and speculative future thinking as an attempt to think beyond our current situation of ecological destruction. It is not about subscribing to a romanticised notion of peasant life, agriculture or "nature" as an ahistorical, unitary harmony, but rather nature and life as a cacophony of different and often incomprehensible rhythms, of living, dying, becoming, mutable and particular.

I have also chosen to write and present the research using a non-narrative style. I write from a perspective that believes that words matter and how we write about events, entanglements, and matters shall seek to meet the experienced and observed – not to re-present but to reflect. And I believe that stories, storylines and storytelling matters in assisting the cultural imagination that seems central to our abilities to respond to environmental change. For me, to meet the reparative practices and cacophonous experiences, I have found help from anthropologist and science fiction writer Ursula K. Le Guin’s (1982, 1986, 2017) work with storytelling, imagination, and multispecies co-existence; from ethnographer, filmmaker and author Philip Vannini’s (2015b, 2015a; 2015) work on off-grid living and more-than-representational style; and social theorist Andrew Abbott’s (2007) work on lyrical sociology.

In their work, I have found an attempt to be able to write more cyclical and regenerative, alive and animated, sensuous and lyrical, particular and mutual, complex and heterogenous. Together, I have also found a critique of social science writing being too alert to the causal and eager to explain, to unite, straighten, and reason the observed and experienced into a narrative. Abbott (2007:71) explains this as:

Implicit in Aristotle’s discussion of narrative in *Poetics*, this concept as a branching sequence of events is at the heart *not only* of the narrative turn, but also – indeed, even more so – of the analytical social science against which the narrative turn defined itself. Both are in this sense utterly narrative in conception, treating reality as a story with a beginning, a middle, and an end, or as a model with independent, intervening, and dependent variables, as the might be.

This kind of writing and position is about moving further than accepting the subjective, symbolic and personal voices in analysis, and try to write from a perspective that is engaged (not outside), from a particular place (a ‘hereness’) and temporal (“nowness”), and the texts attend to concrete emotions (not irony nor abstract mimesis), sympathy, personification/subjectification, and figurative language. And as Abbott write “at

its best, this feeling is curious without exoticism, sympathetic without presumption, and thoughtful without judgement" (2007:94). I will return to their work and how I work with it more specifically later in this chapter and the next chapter 'Research design, material and strategies'.

I mention them here as they are central to the writing. While Abbott is making a clear critique of stories but as narratives in their Aristotelian-sense, I am working with stories as I believe they are inevitable and can make a difference, and I am trying to change the image or story of what makes a story. It is unjust to only write that this is where Le Guin has been most helpful as her essay 'The Carrier Bag Theory of Fiction' (1986) first gave me the idea, and has influenced my thinking, methods and inspired my writing-attempts. Le Guin (1986) suggests to understand a story as a carrier bag and depicts that "the natural, proper, fitting shape of the novel might be that of a sack, a bag. A book holds words. Word holds things. They bear meanings. A novel is a medicine bundle, holding things in a particular, powerful relation to one another and to us" (1986:152-53).

Then, as I write about an eclectic research style, I use the kind of bag that Le Guin suggests, and throughout the following pages, I will try to communicate what is in the bag, what I am going to put in the bag and what roads I am walking. But the content of the bag changes throughout the analytical chapters, where I take in new stuff and leave something behind, and it will be in those chapters that the carrier bag-stories will be most vivid. While I am not able to leave behind the academic-thesis-style with its Introduction (that we are in now), its Middle and its Conclusion, I am trying to avoid the narrative modes of conflict, revelation, straightness, and fitting. "If one reads only to find the narrative or structural account of a temporal and social present, the lyrical text will read as a disappointment" (2007:94). I hope my work will not be read as a failed narrative, but rather as an attempt to communicate and perform the mutability, complexity, and particularity – the cacophony – of a lived life that cannot be united into a fixed, linear, structured narrative.

Throughout the next pages, I will describe the backgrounds I am writing from and responding to, the concepts I am working with, the questions I am raising and researching, and the contexts I have been in.

Going into the foodshed with a carrier bag

In 2015 a new annual Danish journal 'Ny Jord' (New Soil) was released with a critique stating that the climate alarmism narrows our curiosity and imagination (Meedom et al. 2015; Ravn 2015). Inspired by this critique, I am with my methods, choice of empirical contexts and writing style trying to cultivate our imagination with a curious investigation of not only the possible but reparative practices. While drawing on a tradition of critical theory that takes up space in my research bag, I am not trying to reject the biosocial degradation and devastation that also goes on, but I have found it important to include a **reparative attitude** towards research on environmental change. This is a choice made with great inspiration from among others Fisher (1979), Le Guin (1982, 1986), Gibson, Rose & Fincher (2015), Anna Tsing (2015; Tsing et al. 2017), and Donna Haraway (2016; Haraway et al. 2016).

The term 'reparative' refers to a reaction part of the reparative system that an organism starts when damage is experienced and hold links to 'reparation'. Interpreting this biological description within social terms, Gibson, Rose and Fincher unfold 'reparative' as an attitude where "we look and listen for life-giving potentialities (past and present) by charting connections, re-mapping the familiar and opening ourselves to what can be learned from what already is happening in the world" (Gibson et al. 2015:ii). Throughout the study, I have been learning to look out for those life-giving potentialities in this 'damaged' world, and to question what should be 'sustained', what should be 'repaired', what should be 'preserved', what should be 'changed', and what counts as life.

I take a bit of the anxiety out and add some 'reparative' to our Carrier Bag. There seems to be a lack of language, stories, and storytelling for human-nonhuman relations, and for the more-than-human worlds, and

as I briefly mentioned in the opening words of this chapter, I find our **stories and storytelling** immature in relation to the-more-human entanglements. Immature as we cannot speak for the materials themselves, they have some autonomy, mystery, and matter; but we can try to cultivate and grow our arts of noticing and attention, and our languages about and in these matters further. I write ‘we’ and I am significantly addressing the social sciences and humanities communities, but I have also found that the natural sciences can benefit from the kinds of non-structural and subjective positional writing and argumentation that the social sciences and humanities for the last decades, more and less, has accepted. Within the latter, in recent years there has been a turn away from the narrative and towards what in some academic circles is defined as the material and object-oriented turn. My concern about the material-writings is that they sometimes seem to leave an impression of dismissing the words, stories, and languages.

To me, cultivating the stories and storytelling about multispecies collaboration, more-than-human worlds and biosocial sphere does not entail that language, words, and stories should be rejected. To address environmental change, we rather need to practice careful attention to the spheres, rhythms, relations, matters, and entanglements of humans and nonhumans and develop our kind of stories and storytelling from these observations and engagements. The languages for and stories about the reparative, cyclical, cacophony, fertile, and composting practice are always becoming. We seem to need, to learn, to notice stories and a kind of storytelling that goes beyond the modern, structural narratives alert to dualisms, and my work with the Carrier Bag writing is an attempt of this. My attempt and argument are furthermore profoundly inspired by the book *Manifesto for Living in the Anthropocene*, where Katherine Gibson, Deborah Bird Rose and Ruth Fincher (2015) argue that stories are important for understanding, communicating and moving beyond the ecological crisis of our times. They suggest telling stories that “enact connectivity, entangling us in the lives of others; have the capacity to reach beyond abstractions and move us to concern and action; are rich sources of reflection; and enliven moral imagina-

tion, drawing us into deeper understandings of responsibilities, reparative possibilities, and alternative futures.” (Gibson et al. 2015:ii)

I will go further into the stories in the next chapter, and here, in this section, I will introduce the idea that stories hold transformative gestures in their ability to actualize nuances of emotions, perspectives, values, practices, and realities. Because of this, I also believe they hold the potentials to enhance cultural imagination and ideas for other realities and orders that could make us live *beyond* the Anthropocene (Fjalland 2018; Ghosh 2016; Gibson et al. 2015).

Our Carrier Bag is a story.

You might have stumbled over the word **response-abilities**, and it might be unfair that I have not added it to our Carrier Bag yet. The main concern behind this study has been trying to understand how to not only ‘sustain’ but ‘respond’ to environmental change. With inspiration from Rose (2015) and Gibson-Graham and Miller (2015), I have become interested in the kind of ‘abilities to respond’ that seek to resituate humans in ecological terms and resituate the non-human in ethical terms (Rose 2015:4). Freudendal-Pedersen (2014) uses Zeitler’s (2008:233) wordplay with responsibilities, writing that “proper responses depend on a human ability to respond, human ‘response-ability’”, to discuss the relation between ethics and responsibilities to respond to the pressing issues of climate change. Freudendal-Pedersen stresses that:

The ability to respond to a common good in a world where individualization is a main driver seems from an everyday life perspective to be increasingly challenged. [...] This should not be mistaken for egoism, nor lack of ethics, nor common responsibility. [...] Individuals can feel responsible but without feeling they have an ability to respond (2014:146).

Furthermore, Latour (2014), Barad (2012) and Haraway (2008, 2016; 2016) search and discuss response-abilities. In *Staying with the Trouble*

Haraway points out that:

We are all responsible to and for shaping conditions for multispecies flourishing in the face of terrible histories, and sometimes joyful histories too, but we are not all response-able in the same ways. The differences matter – in ecologies, economies, species, lives. [...] Many kinds of absence, or threatened absence, must be brought into ongoing response-ability, not in the abstract but in the homely storied cultivated practice” (Haraway 2016:29, 132).

It is therefore not ethical as a higher guiding moral principle for how much “we” can hurt “nature” (like exhausting soil, use of chemicals, design the feed or advancing breeding techniques – all to ensure the highest and most efficient output (Hansen 2016; Shiva 2016; Watts 2014)). I am trying to explore an ethical response that is situated and practical, and in line with Mikulak, I then suggest that response-abilities are about shifting “the tenor from moral codes to embodied knowledge and affect” (Mikulak 2013:135). Responding to environmental change becomes about cultivating affective ethical human-nature relations that seem to have been neglected by a Cartesian modernist, instrumental thinking. The affective and relational perspective understands the web of life and world-making practices as also involving more-than-human dependency and collaboration. Cultivating conditions for reparative futures is about searching for ethical responses that acknowledge more-than-humans as mutual inhabitants of the planet. Rose (2015:5) depicts that: “human beings are enmeshed in webs of life as much as are koalas, eucalyptus, flying foxes, coral, vultures, and bacteria. [...] It is an ethics that brings gratitude for the gifts of life into dialogue with our responsibilities within a wider web of life.” Rose’s work brings another focus and light to this study’s empirical contexts about food production and food systems, specifically concerning human’s practices and relations with chickens, eggs and food waste. I wrote earlier that this study’s intent of focusing on human-nature relations are at the expense of sociological human-human distinctions; that we as humans do not all have the same privileges and abilities to respond. Again, I wish to emphasise that it is not my intent to

neglect these issues, but to (also) direct our attention to the 'natural' matters, beings and materials, and explore what we in the humanities and social sciences can learn from these engagements and entangles.

The kind of 'abilities to respond' I am then trying to learn more about are the kind of engagements that come with affective, embodied experiences within the 'web of life', and I explore the places or sites where engagements might occur. Hegnsholt and Lejre are responding to the environmental change, and it is their kind of responses that I am trying to learn more about. In this study, I am trying to learn about the entanglements surrounding the chickens, eggs, and food waste that moves between the urban and rural. I explore these practices by questioning what agriculture could be like if it is not practiced in industrial and instrumental ways. I am trying to explore in what sense they become meaningful for those humans and more-than-humans involved, and how they try to cultivate 'abilities to respond' by resituating humans in ecological terms and resituating more-than-humans in ethical terms (Rose 2015:4).

A response to environmental change can be paralysis, ignorance, denial, anxiety, and these can be performed in multiple ways. In this study, responding to environmental change is also attached to activist practices and transition that seeks to move out of paralysis and redirect the life compass. My empirical contexts might immediately appear 'quiet' and 'slow' in relation to the immediate image of activists rebelling on our streets with stone and fire. It is my idea that these kinds of practices with chickens, eggs, food waste, humans, and landscapes might hold **transformative invitations or gestures** that can be perceived as activist-like. I find Sarah Pink's (2012) work about activist practices helpful in this relation. She argues, "it is through a theory of practice and place that we can comprehend the material, social, sensory and mediated environments of which everyday life, activism and thus processes through which sustainability might be achieved, all from a part" (Pink 2012:13). In continuation of the perspective on stories, telling the stories about these practices, projects and places of humans, chickens, eggs, food wa-

ste, and landscapes might be essential to transformative gestures. The transformative gestures I will explore with this study are those connected to the relational, embodied and storied experiences with the materials, including eating and tasting (Harbers, Mol, and Stollmeyer 2002; Mol 2009a). It is the links and relations with the materials themselves that hold transformative gestures, and yet the materials cannot be left out of the stories and explorations. Food waste is in the centre of this clash of rationality, but these matters are not just a medium, but a companion in its collaborating (Hegnsholt) and rivalling (authoritative) senses.

From an empirical point of view, this work explores how becoming 'able to respond' also is a question of becoming able to imagine; an ability that comes from *learning to notice* the world around us, a kind of biosocial sensitivity, avoiding single notions of modernity, and *listening* to different stories and different ways of storytelling *through talking, tasting and touching*. (Fisher 1979; Gibson et al. 2015; Le Guin 1986, 2017; Haraway 2016; Mol 2009b; Stengers 2010; Swanson et al. 2017).

In continuation of this thinking, I involve the work of Mikulak (2013) and Kloppenburg et al. (1996) that suggests going into the **foodshed** with our Carrier Bag. About the 'foodshed', Kloppenburg et al. (1996:34) write that:

The intrinsic appeal the term had and continues to have for us derives in part from its relationship to the rich and well-established concept of the watershed. How better to grasp the shape and the unity of something as complex as a food system than to graphically imagine the flow of food into a particular place? Moreover, the replacement of "water" with "food" does something very important: it connects the cultural ("food") to the natural ("...shed") [...] However, the most attractive attribute of the idea of the "foodshed" is that it provides a bridge from thinking to doing, from theory to action.

The 'foodshed' works as a framework for a certain kind of thinking and acting that seeks to encompass the "physical, biological, social, and intellectual components of the multidimensional space in which we live and eat" (Kloppenburg et al. 1996:41). Kloppenburg et al add

a normative meaning to the term ‘foodshed’ as they use it to critically analyse the existing global food system, and to imagine the alternative shapes that could guide our actions. Going into the foodshed seem to make it possible to negotiate alternative value practices by reflecting on what should be in our Carrier Bag for future food production and human-nature relations, and it is my idea that this kind of reflection about what should be preserved, cultivated, discarded, or changed is furthermore central to exploring reparative futures.

I find this foodshed-process relevant to be able to challenge industrial, rational and instrumental notions of the *web of life* that, so far, keeps us fed and alive. I use this foodshed-process of entering a place between the existing and the alternatives with the Carrier Bag to go into a world of humans, chickens, eggs, food waste, and landscapes. With the empirical context and the foodshed-perspective, I am questioning how chickens and eggs could be more than mere objects of exchange, connecting commodities with their life-worlds and the life-giving conditions, and explore how these practices could be alternative reparative and response-able human-nature practices. This has made me wonder about the spaces of ethical responses with multispecies well-being, affection and compassion, what counts as life, and under which conditions these lives live.

In this work, the foodshed is a web of roads to be walked with our Carrier Bag

Rebellious Food and Waste

I have briefly mentioned why I believe it is valuable to study human-nature relations within food and waste practices, and in this section, I will elaborate that story further. Along with the ambition to notice, listen to and learn from response-abilities that guide towards reparative futures, I have chosen to focus on the sharing of food and waste. This focus has an empirical starting point within a Danish partnership project called Sharing City that took place from around August 2015 to December 2016. The project collaborated with seven Danish

municipalities and 24 projects (called ‘innovators’ within the project) working with different aspects of the sharing economy. I chose to focus deeper on two of the actors involved in the Sharing City Project, Johanne from the small-scale farm named Hegnsholt and Tina Unger, from Lejre Municipality. What is significant about Hegnsholt is that it delivers eggs and chickens to several “foodie-recognised” eateries in Copenhagen and that Johanne, the farmer, can take kitchen leftovers such as tops of carrots and leftover non-touched bread back to the chickens and hens as part the agreement. Hegnsholt is located within the Municipality of Lejre, and what makes Tina Unger’s perspectives interesting are her views on the municipality’s role within the environmental transition and her experiences of making Lejre (the rural) a sustainable and ecological pantry of the Copenhagen region (the urban).

Throughout the research, I have been trying to understand how Hegnsholt (through the lens of Johanne) and Lejre Municipality (through the lens of Tina) work within their organisations and their relation around values of trying to transform agriculture into a more sustainable practice of terraforming and reconnect the urban-rural through food and waste movements and productions. I wanted to understand how their practices were possible, understand their language and stories, and more ontologically understand how they seemed to practice a kind of mundane, peaceful and slow kind of activism – something that contrasts the immediate ideas of activism as something more abrupt and volatile.

In relation to Pink’s research on the Cittaslow movement, she argues “such forms of activism are also particularly interesting because they cannot be studied in ways that are separated from the everyday life. This is because Cittaslow and similar movements impact on the material and sensory environments of towns, and extend the potentials these hold for practices that local people might engage with” (Pink 2012:10). My study’s approach furthermore involves a focus on the mundane, everyday life as something we are inevitably in – how the professional lives of both Tina, Johanne and myself are interwoven with the more private, everyday practices (Massey 1994; McDowell 1999; Pink 2012; Sander-

cock and Forsyth 1992; Simonsen 2005). According to Pink (2012:12):

we are both in the flow of everyday life, of being and doing, and we are in and part of the very environments of everyday life. To understand everyday life as both a source of activism and change, as well as a domain where sustainability might be achieved, I argue that we need to comprehend it from within.

Not only are the practices of Hegnsholt and Lejre Municipality's approaches challenging conventional agriculture and food production, they are also attempting to respond to, act or rebel against the anthropogenic influences on environmental change. Halfway through the research process, it turned out that the kitchen leftovers that Johanne received from the eateries in Copenhagen were categorised as waste and where therefore deemed unfit as animal feed due to the risk of contamination and disease spreading according to the Danish Veterinary and Food Administration. This meant that the exchange relation was closed down, and it can be said that unintentionally, the food waste became an 'infectious' and 'active' matter. The 'closure' and the different understandings of the food waste showed different rationalities of human-nature relations. The food waste practices can be understood as an activist matter: Johanne started using food waste as animal feed to address the enormous amounts of food waste from private households, eateries and supermarkets in the global North.¹ Also, she did this to address the production of industrial prefabricated feed that among other things contains high protein soybean meal and is used for chickens, pigs and cattle. The global soy-production is expanding and causes deforestation, displacement of locals and monocrop-

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1) In developing countries, 40% of losses occur at post-harvest and processing levels while in industrialised countries more than 40% of losses happen at retail and consumer levels. In the Global South, the main part of food waste - food loss - occur before the food gets to the market places. This happens due to failed harvesting technique, poor storage and refrigerating techniques, and transport conditions. The problem is not that enough food is being produced, the problem is that too much food is being produced, but never gets to the mouths that need them most. Also, it is estimated that between 25-35% of the initial foods are discarded before getting to the Global North, due to strict standards on size, shapes and colour. Link the FAO (Food and Agriculture Organisation of the United Nations): <http://www.fao.org/save-food/resources/keyfindings/en/> (website accessed December 4th, 2018)

ping that threatens biodiversity on the South American continent.²

We are adding food waste and feed production into the Carrier Bag

When Hegnsholt's exchange relation with the eateries closed down, the food waste became politicised as it was confronted with regulations and disagreements of how the regulations shall be interpreted. The closure was a significant moment for Hegnsholt and for this study, as I was part of the closure, and together, this made it even more important to study Hegnsholt's practices further. In the chapter 'Fermenting sterile desires', I will unfold and discuss the closure and the reasons behind it, the food waste itself, and Hegnsholt's and the exchange network's responses to the closure as activist practices. From an agroecological point of view, food waste is a nutritious, fertile and highly valuable actor for cultivating reparative soils and reparative conditions for chickens and hens, but within instrumental and industrial logic, the food waste is considered wild and a potentially contaminated actor. The food waste and the practices around it seem to hold activist and transformative gestures that challenge instrumental and universalist views on human-nature relations. I will unfold this argument in the analytical chapters and discuss how different notions of food waste in relation to animal feed portrays different knowledge paradigms of not only food production but also human-nature relations. The notion of waste as feed reveals an administrative and cultural construction of risk, fear, and anxiety, and Hegnsholt seeks to challenge this story and practice this is where the transformative gestures appear. With this short description, I seek to explain why waste and food can be rebellious - as they rebel against current practices - and suggest alternative practices that hold historical, present and futurist links.

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 2) Link Mighty Earth new report on the relation between soy production in the Global South, and feed companies and agriculture in the Global North: <http://www.mightyearth.org/avoidablecrisis/> (Website accessed December 4th, 2018)

I add contamination, bacteria, unknowns,
and some wilderness into the Carrier Bag

Thinking along food, waste and places

The production, consumption, and disposal of food are among the human actions that to great extent intensely challenge the ecological system that feeds us (Mikulak 2013; Shiva 2016; Steffen, Crutzen, and McNeill 2007). This includes the practices and choices of land use, breeds and crops, use of chemicals, fertilizers and feed-types, raw material processing, production, distribution, and consumption. The relationship between food and waste, places and mobilities are essential as food travels progressively longer distances, and these journeys raise several critical questions for commodity markets, health issues, farmers' well-being, infrastructure, global food policies and economies, local production, consumption, diseases, and regional regulation, just to name a few. Gibson (2007) argues that:

As an object of material culture, food is produced and consumed through complex geographies of mobile people, plants, and animals that travel across increasingly global infrastructures of production, transportation, and preparation. Food's mobility becomes embedded in culinary cultures consisting of techniques, recipes, and styles of cooking and eating. Food is a highly mobile product and also has the capacity to move us as consumers. I use the term food mobilities to foreground the many different mobilities (such as corporeal, technological, virtual, imaginative, and object; see Urry,(2000)) that inform or inflect *cultures of food, taste, and eating* (2007:16).

This suggestion of thinking about food production (and its inherent waste production) in relation to mobilities is also elaborated upon in *The Routledge Handbook of Mobilities* (Adey et al. 2014) where Abrahamsen and Mol (2014) examine how food travels as recipes and ingredients, pre-packaged and deep-frozen, from restaurants (in this case the Pizza Hawaii) to a person's home, while the pizza simultaneously carries many other sites and situations within it. Their analysis shows that this specific pizza is global, as the ingre-

dients come from many places, but it has no originality at all. This finding is intriguing, because when you start to follow different varieties of so-called local meals, plants and vegetables, and animal breeds, national boundaries and territories immediately disintegrate, and you find that food has travelled since humans could carry it; in that sense, the world has presumably always been global, at least always related across national borders that are a rather new invention.

Borders are upheld politically and legally permeable, open for someone and somethings, closed for others and other (Law and Mol 2011; Sheller 2014), but as I will go through in 'Fermenting sterile desires', this does not necessarily entail hermetically closed limits that cannot be trespassed or even transformed by mutant ninja bacteria, corruption or environmental activism. It might be provocative to place these practices in the same sentence, as their ethical human-animal practices are significantly different from each other – e.g. economy corruption and animal welfare. I list them together because they elicit the vulnerabilities of border-worlds and global food systems: for instance, a study of the outbreak of foot-and-mouth disease in the UK shows that it might have come from "illegal meat imports carrying living virus from a region of the world, perhaps Asia, where foot-and-mouth disease is endemic, were probably fed directly to the pigs which then contracted the disease." (Law and Mol 2008:134). The foot-and-mouth disease is one of the reasons why Hegnsholt's practice of feeding food waste to animals has been stopped, and I highlight Law & Mol's study to bring attention to the global-local, particular-general tensions of food production and systems and the related regulations and rationalities on the fields.

I am putting scale into our Carrier Bag

Food is part of the very substance of life, it connects human and non-humans, and reveals alternative ideas of sharing, as we as a species need to eat to survive, and, as a commodity, this makes food significantly different from other consumables. In *Politics of the Pantry*, Mikulak argues that:

Because food exists on the boundaries between different realms of our lives, it touches on numerous tensions and anxieties. Food represents the most basic transformation of nature to culture, and culture to nature; defines and shapes social and gender relations; reveals global and local inequities; organizes entire sectors of the economy; gives focus to anxieties about family and community life; organizes and mobilizes cultural identity; and embodies the tension between public and private subjectivity within the global everyday (2013:6).

In her book *Hungry City: How Food Shapes Our Lives* (2008), Carolyn Steel makes a historical description of how food, through its production, transport, sale, consumption, and dispossession, gives shape to cities. Ten thousand years ago, agriculture and cities were clearly bound together, and until the Industrial Revolution, this relation was an essential part of city life (Steel 2008). Steel describes this through the physical outline of cities, where food used to be the spatial, material, and cultural centre of city life, and exemplifies this by describing how the temple that distributed food supplies was the centre of Ur in Mesopotamia, and how London's street names reveal the market-places for food, e.g. Corn Hill, Bread Street, Fish Street, Smith Street, and Meat Market. "Markets and shops, pubs and kitchens, diners and waste-dumps have always provided the backdrop to urban life. Food shapes our cities, and through them, it moulds us – along with the countryside that feeds us up." (Steel 2008:x). I suggest thinking of food and waste in their various relationships and how they 'travel' and are 'carried', as a relational-material entanglement of global, local and bodily infrastructures, materials, human and non-human, stories, food waste and leftovers, diseases, eating, risks, compassion, and caring. This research project is about understanding the transformative gestures of food and waste, and how activist (transformative) practices are situated and related to local and global flows, how they are material, emotional, sensory, social environments.

I will add 'urban' and 'rural' into our Carrier Bag

Contexts: Those trying to do it differently

The number of stories and piles of empirical material you have after three years of research are quite high and messy. Choosing the ones you want and can put in writing is a puzzling task that I will come back to in the chapter about methodological considerations. This dissertation is – as are most (final) publications – a tiny picture of a bigger work, a snapshot of a life in movement. In the following sections, I will briefly present the empirical starting points of this research project and what has led me to the emphasis on food waste, chickens and eggs. The following descriptions are both elaborations of the contexts, projects and places as well as my way of getting engaged with the fields and thereby I seek to situate the research project and myself in the research process.

Sharing City: Can we share our way to better cities & local communities?

During the Summer of 2014, I was working at Roskilde University (Denmark) as a research assistant as a former colleague from the Danish Architecture Centre contacted me. He wanted to know if I would be interested in doing a PhD about sharing economy and cities, and if so, we could try to write an application. The American host-platform Airbnb had just entered Copenhagen, and day-by-day, new platforms, networks and organisations where peers could share spaces, places, objects, capital, and skills appeared. At the time it was surrounded by great fascination. It seemed like there was a new movement, a shift of paradigm on its way. Slogans like ‘access over ownership’, ‘what’s mine is your’, and ‘from I do to we do’ gave rise to intense debates on whether this was the emergence of a new economy that would be more egalitarian, just and sustainable or a hyper-capitalist one (Bardhi and Eckhardt 2015; Bay 2014; Dalsgaard 2014; Kostakis and Bauwens 2014; Martin 2016; Nielsen 2014, 2015; Rhue and Sundararajan 2014; Rifkin 2000, 2014; Schor 2014; Skytte 2014; Steno 2015; Sundararajan 2014; The Economist 2013, 2015) for-profit service provision (Uber).

The funding for the research project was established through means from both the Danish Architecture Center (with means from the philanthropic foundation Realdania) and the Roskilde University, and I started the work in December 2014. In January 2015, the Danish Government addressed a motion to support and highlight sharing economy (Folketinget 2015) proposed by the Red-Green Alliance party. The debate reflected an enthusiasm from all parties for the potentials in sharing economy. Only a few months later scepticism occurred and pointed out issues such as underground economy, social taxation, workers' rights, insurances, competition acts, environmental taxation, and housing prices.

During the first six months, I was short of breath from chasing new definitions, growth extrapolation, and listing new platforms, companies and organisations, listening to what was being shared, and the kind of sharing that appeared. After a moment of rest, I stopped chasing concept- and future-forecasting as it felt a bit pointless and "fluffy" and wondered what I was actually looking for and why. The Danish Architecture Centre aimed at settling a big partnership project that should investigate how different sharing economy products and services, business and organisations could enhance green transition, social equality *and* economic growth in local municipal contexts. The idea was to involve municipalities, organisations and businesses working with the sharing economy in its most broad sense. Therefore, just before going on maternity leave, I decided to exploratively follow how the project participants negotiated, situated and practiced the sharing economy. More specifically, I wanted to study their practices, stories and reasons for doing what they did. Furthermore, I decided that I would follow and try to understand the coexistence and sustainability aspects of the activities and actors. Bluntly speaking, I was no more exact than that, because at the time I did not know which municipalities or companies would participate.

When I came back to work from maternity leave in April 2016, the project was shaped and named 'Sharing City: Can we share our way

to better cities & local communities?'. By coincidence, it started officially the same day I returned, and I threw myself into it by going along and following the conversations. This is what gives shape to the analysis in chapter 4 'Stories of the Sharing City'. The Sharing City Project was designed as a laboratory with municipalities, businesses, organisations, consultants, and researchers. For 1.5 years (August 2015-December 2016), seven Danish municipalities explored how the sharing economy could and should become a meaningful part of either their institutions, action plans or political agendas. **This is a map of Denmark** where I have highlighted the participating municipalities with red dots. They are mainly placed in rural and suburban regions of Denmark, and vary in size, demographics, local challenges and possibilities.



The conceptual and practical exploration also involved 24 actors, called innovators in the project, that worked with different aspects of the sharing economy. The innovators had to address one or more of the issues that the municipalities had pointed out collaboratively. These issues were reformulated into actions: Share tools, Share waste, Share facilities & spaces, Share data, Share transport, and Share activities. The actors included both organisations, co-operatives, associations, and businesses; ideas, projects, start-ups and established businesses and organisations.



Icons from Flaticon.com

They represented orientations that were socio-economical, environmental, commercial, local, national, and international, and dealt with different subjects such as basements, local knowledge, kitchen waste, and knitting. The heterogeneous and multifaceted group of actors was chosen to deal with a variety of local issues and to broaden the scope of representation. In chapter 2 ‘Research design, material and practices’, I will describe the different events, conferences, seminars, and collaborations that took place over time.

I add sharing and sharing waste into the Carrier Bag

Here, I have placed a logo-illustration of the project and some of the main actors and partners who were part of it. First, from the left, is the main financing partners Realdania, a philanthropic foundation, and the Danish Business Authority with means from the Green Business Development Fund. Then the seven municipalities, who each

also contributed with financing according to municipal economic size and human-hours. Then there are the so-called knowledge-partners, which consisted of the consultant firms Rambøll Management and Rainmaking Innovations, and a professor from the Copenhagen Business School, a professor from Roskilde University, and a partner from Bird & Bird Law Cooperation. After them, I have placed the media partners, 'Politiken' and 'Kommunen', and finally, I have placed the DAC that acted as the overall project owners and managers. I have tried to make a meaningful and informative illustration of the 24 innovators that could give an overview of the manifold practices and projects, but it keeps being a confusing image with a lot of company logos. There were so many brilliant and wonderful projects.³ As I wanted to explore our abilities to respond to environmental change more deeply, I found it essential to look into two of the Sharing City's actors further; the specialised, small-scale organic farm Hegnsholt and Tina Unger from Lejre Municipality. The choice of focusing on these actors might in writing seem very deliberate and linear, but it was not. My interest in their practices with food, waste, agriculture and environmental transition was evoked from the beginning.

There is a place...! Lejre Municipality

On the 5th of February 2015, only two months into my research project and almost a year before the first Local Sharing Days within the Sharing City Project, I accompanied the project leader to a meeting with the head of food, environment and business in Lejre Municipality, Tina Unger, and the municipal director, Inger Marie Vynne, at the Municipality of Lejre. The meeting was initially about considering whether Lejre would be interested in participating in a Sharing City Project. The municipality consists of 49 hamlets, villages and localities in the rural forefronts of the Copenhagen region – approximately 45 kilometers of distance. We met in a former shop that was then used as a public space by the municipality by the main road in the small town of Hvalsø.

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 3) Each innovator is described further in the Sharing City Magazine: <https://dac.dk/wp-content/uploads/2017/10/Sharing-City-Magazine.pdf>

There was an ongoing discussion about the relation between the new (primarily American) phenomenon of sharing economy and cities/built environments. Tina Unger followed by presenting Lejre Municipality, what they valued and how they worked. I found myself excited about their work, and I was impressed by their interpretation and practices relating to citizen participation, co-existence, environment, and agriculture. Tina mentioned a number of people and projects engaged in creating more response-able food production that I could not wait to hear more about, and this is actually where it all started.

At this meeting, I realised that I could combine my humanities knowledge about places, cultures and histories with matters of cooking, food, waste, and animals. I am most familiar with food and cooking as I grew up in a family that valued organic, seasonal groceries and home-cooked meals. I have no knowledge of farming, but despite this, the summers I spent with my grandfather in my grandparent's vegetable garden and sitting in their small chicken run are some of the greatest moments of my childhood. I remember how we dug for fresh potatoes, the sun-warmed tomatoes and cucumbers from the small greenhouse, the sweet taste of freshly picked peas, the smell of the soil on a hot summer day when the wind was calm, and the only noise came from insects humming. Even when writing this, I remember the feeling of dry soil inside my sandals as I used to pick strawberries, gooseberries, redcurrants and blackcurrants. The strawberries were usually eaten the same day, either as they were or with sugar and cream, but the rest of the berries were frozen into portions or preserved as marmalades and cordials.

At that meeting in Lejre, I suddenly remembered these memories. I was immediately drawn to the relations between coexistence, collaboration, environments, meaning, places, food, education, what matters, gardens, the future, and sustainability. These memories were probably also propelled because I had just found out that I was pregnant with my second child. I highlight my pregnancy because – at least to me – having kids has enhanced and strengthened my desire to help cultivate a sustainable world. The concepts and stories at the meeting

in Hvalsø spurred my imagination and provoked my curiosity, and I have not been able to leave them and their relations since. I find it important to emphasise that, until that moment in February 2015, I had not put them together. For the last four years of this research project, these matters and meanings have intervened an essential aspect of my life. Furthermore, it might be, as Michael Mikulak puts it, that “somehow the topic demands it – you cannot read about fresh-baked sourdough, or the fecundity of a garden in the summer, or the pedagogical impact of school gardens without, in some measure, transforming your own life” (Mikulak 2013:135). I will involve some of these reflections throughout the analysis, and in the next chapter ‘Research design, context and strategies’, I will elaborate further on the use of this kind of autoethnographic knowledge in research.

But let me return to the municipality for a while. Another thing I am concerned about is the environmental change, and what kind of future my children and their children will be living in. Without being



*Kids climbing an old tree in Lejre.
This picture is part of the book 'Our Place:
A Story of Lejre Municipality' (Lejre 2015)*

clearly aware of it during the meeting and the following conversations, I was attracted to the story about Lejre because there suddenly seemed to be a place, projects, and practices that were trying to rethink the human-nature relations amongst the 'apocalyptic' narrative. It might not be perfect, but this was a place where people were engaged, committed and passionately trying to do something. I felt that perhaps some of the apocalyptic anxiety could be replaced, or at least challenged, with something more germinating and fertile. The municipal strategy for Lejre is summed up in their motto: 'There is a place where we share and create' (made before the Sharing City Project), and this strategy has been developed together with citizens, local companies and organisations.

When the municipality in 2014 had to develop their strategy, more than 1000 citizens were part of putting their needs, desires and visions for the municipality into words. These were condensed into seven tales that can be read in the book 'Our Place: A Story of Lejre Municipality' (Lejre 2015), and, all in all, the civic and private participants in the city strategy expressed that they value the natural environment, the communities, and a kind of innovative space to test and create. Furthermore, they emphasised qualities of the area as a good environment for children to grow up in, a high degree of volunteers, its cultural heritage (among others, as the land of legends), locally produced and organic food, and the fact that the villages are in a rural region but close to Copenhagen. Lejre has a long tradition of civic engagement, co-operatives and strong communities, and through the 1970s, educated and creative people moved from the cities to this rural place and experimented with different practices of eco-societies.

I wanted to get to know this place better, and more specifically, I wanted to know what they did as a municipality to enhance these values, to cultivate them and keep them. For almost three years, I have been interviewing, following and collaborating with Tina regarding these questions. Before the Sharing City Project started, at that initial meeting in Lejre, Tina made me aware of the Hegnsholt

Farm and Johanne the farmer, and I was intrigued from the beginning; Tina told me that the chickens were fed with food waste, and that fine restaurants and food critics had pointed out that the eggs were significant and delicious. How can the eggs be so special that they are mentioned in food reviews? Do they taste of food waste? A year later, in June 2016, I met Johanne at the local sharing day in Lejre, and we started our conversation, but as Johanne was quite busy mostly running the farm on her own, most of my conversations with her took place outside the framework of the Sharing City Project in the beginning. As mentioned, Johanne's food waste exchange agreement was closed down in December 2016 immediately after the end of the Sharing City Project. This was the beginning of a close conversation that continued until the end of this research (October 2018). As a public servant in Lejre Municipality, Tina is close to Johanne as she has been collaborating and assisting Johanne from Hegnsholt.

*The Farm: Eggs and meat
with a significant taste of waste food*

Hegnsholt is a small-scale organic farm with around 1,200 chickens and hens, some pigs and lambs. Hegnsholt operates on the principles of a cooperative where you buy shares in a hen, chicken or lamb. The eggs and chickens are considered to be of exceptionally high quality as they are bought by acknowledged and award-winning restaurants and eateries in Copenhagen, such as Bæst, Mirabelle, and Manfreds⁴, just to

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4) The delivery of eggs to Bæst, Manfreds, and Mirabelle stopped in the spring of 2018 as the three restaurants, all owned by Christian F. Puglisi, are now self-sufficient from their own farm Farm of Ideas, also located in Lejre. Johanne has known that this was Puglisi's plan all along, and Johanne adds up the shortage in the event they run out. She still delivers chickens. I highlight these actors as Christian F. Puglisi has played an important role in highlighting the administrative conflicts of sharing food waste. Christian F. Puglisi also owns the Michelin-star restaurant Relæ and is the former sous-chef at Noma, and this puts him in a position where authorities listen.



*The hens and chickens at Hegnsholt around a carrier of food waste from the Copenhagen restaurants.
Photographer: Hegnsholt.*

name a few⁵. The animals at Hegnsholt are raised in accordance with organic standards and with the spotlight firmly on the animals' welfare and quality of feed. Since Hegnsholt is located in Lejre, the geographic area served by the farm is limited to Lejre, Roskilde and Copenhagen. Hegnsholt intends to operate the business in a non-profit manner, with all income to be used on the operations and farm animals. An essential part of Hegnsholt's organisational model is that the restaurants sort out their fresh leftover vegetables (such as carrot tops) and leftover bread (that has never touched a plate), which can then achieve a renewed value as waste feed to Hegnsholt's hens. It is Johanne's belief that hens and animals should be fed with natural and fresh feed. In this case, 'natural and fresh' means resources that, for instance, come

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5) Johanne delivers chickens and eggs to 14 eateries, but currently (autumn 2018) only receives from 5 organically labeled eateries. Despite the closure of the food waste exchange, the decision is still surrounded by ambiguity, vagueness and some negotiable openings, which leads Johanne to continue the exchange. Due to Bæst's experience of getting fined (which involves a charge per visit of between 400-650 Euro) she does not wish me to mention the names of the other eateries.

from fresh vegetables and the living environment (e.g. earthworms, grass, and clover) and are opposed to artificially prefabricated feed.

On December 12th 2016, a month after the completion of the Sharing City Project, the Danish Broadcasting Association broadcasted a story on Hegnsholt and the exchange of food waste from the Copenhagen restaurants and eateries as an example of the sharing economy in the Sharing City Project (Tjaerandsen 2016). A few days later, the Danish Food and Veterinary Administration's mobile task force showed up at Hegnsholt and at the restaurant Bæst. The exchange agreement was closed down due to theoretical risks of contamination of diseases like foot-and-mouth disease, swine fever, and mad cow disease (BSE). Hegnsholt and Bæst were given fines for running illegal feed production and feeding animals food waste. While writing up this dissertation, Johanne, Tina, and the other actors in the exchange network are continuously trying to develop the rules in accordance with environmental and ecological concerns and sensitivities. What relates Tina (Lejre Municipality) and Johanne (Hegnsholt) is both the conflict of using food waste as animal feed, where they assist each other, and their ambitions and curiosity to explore how we are able to respond to environmental change in relation to food production, food systems, and urban-rural relations.

A look into the carrier bag and storylines of the thesis

To study the recurring main research question, I have walked with the Carrier Bag into a foodshed of chickens, eggs and food waste. I have gathered, tasted and wondered with feminist theory, situated knowledge, critical theory, and poststructuralism. I have taken up and carried enchantment, embodiment, mobilities, geographies, historicity, literature, planning, anthropology, natural history, and utopian thinking. Altogether, with an intention to cultivate criticism and re-imagination while performing the paths and embodying the walk as we walk. The following illustration seeks to show what is currently in our carrier bag. Along the way, I have posed these questions *to* and *with* the empi-

Our Carrier Bag is a performative story



Foodshed is a web of roads to be walked

rical material, and these questions have inspired the shapes of the discussions and reflections in the analytical chapters, that all point to the recurring main research question. Roughly speaking we could talk about four empirical topics: sharing cities, human-chicken, theoretical risk of contamination, eating and tasting. These four topics give shape to each chapter in the analysis, and I have tried to point towards some of the questions that each chapter discuss. These questions are presented in relation to presenting the chapters.

With this introductory chapter I have presented the basic concern and

motivation of this study, the theoretical field it relates to, central theoretical concepts and the empirical context it has worked within. In the next chapter '**Research design, material and strategies**' I will discuss and elaborate on the philosophy of science, the overall research design, analysis strategy, and the concepts involved in that process in detail. Moreover, I will elaborate on the methods that I have used, how, why, when and in which relations, and discuss the ethical considerations of the related research. Four analytical chapters will follow. The first analytical chapter '**Stories of the Sharing City**', describes how the Sharing City Project. and the conversations and practices of the sharing economy. became a starting point for a new understanding of spaces and places, practices and peoples, commons and co-existence, humans and nonhumans. In this chapter, I move from the Sharing City Project to the work with Tina Unger, and I will develop the basic ideas about the response-abilities and reparative futures. Within this chapter, I am asking; how did the actors of the Sharing City work with and contextualise the sharing economy to their local context and situation? How was the sharing economy, its practices and aims storied in the Sharing City Project? What kind of understandings of space, time, human and more-than-human relations and practices did the Sharing City Project bring attention to, and what was the tensions and ambiguities of these?

Chapter 4 '**Humanimal relations**', focuses particularly on Hegnsholt. Within this chapter I am asking: What kind of human-chicken relations are practiced and taking place within the organisation and networks of Hegnsholt Farm, and why? How do these practices connect with past, present and future practices of food production, and what could we learn about human-nature relations from this history? The chickens and eggs of Hegnsholt are beings, eating others and being eaten, and they are sold as commodities; what ambiguities appear in these relations? I will explore what we can learn, from the human-chicken relations at Hegnsholt, about reparative and response-able human-nature relations. With this chapter, I am going into the foodshed of chickens and eggs, and it is a story that reaches back ten thousand years and follows the movements and relations of the domesticated chicken until the cyborg

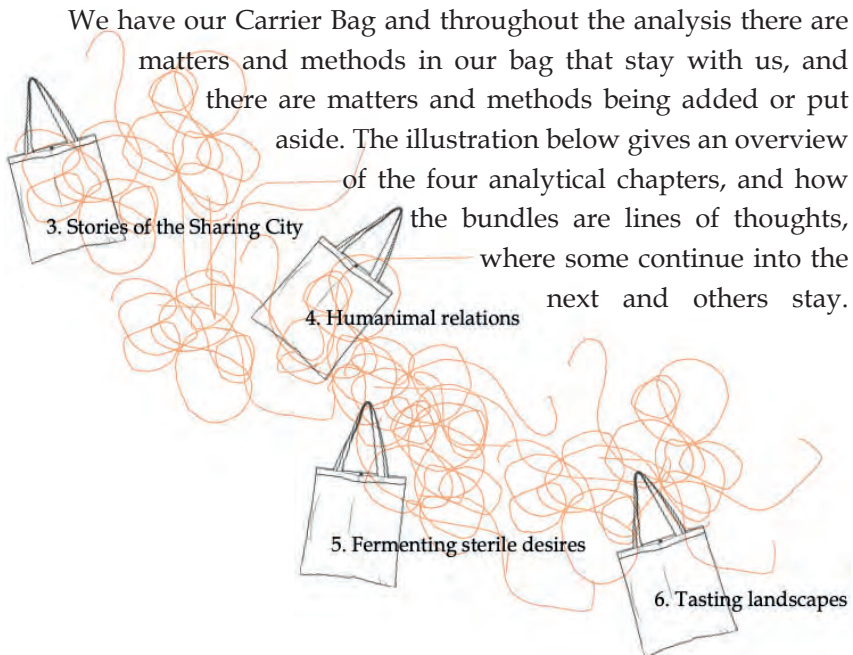
moment of modern poultry production. Working with this historicity is about situating Hegnsholt's practices in a larger story of agriculture and peasant life, not to compare, but because Hegnsholt's practices hold ancient inspirations for human-nature relations, and is responding to or rebelling against modern, instrumental poultry production.

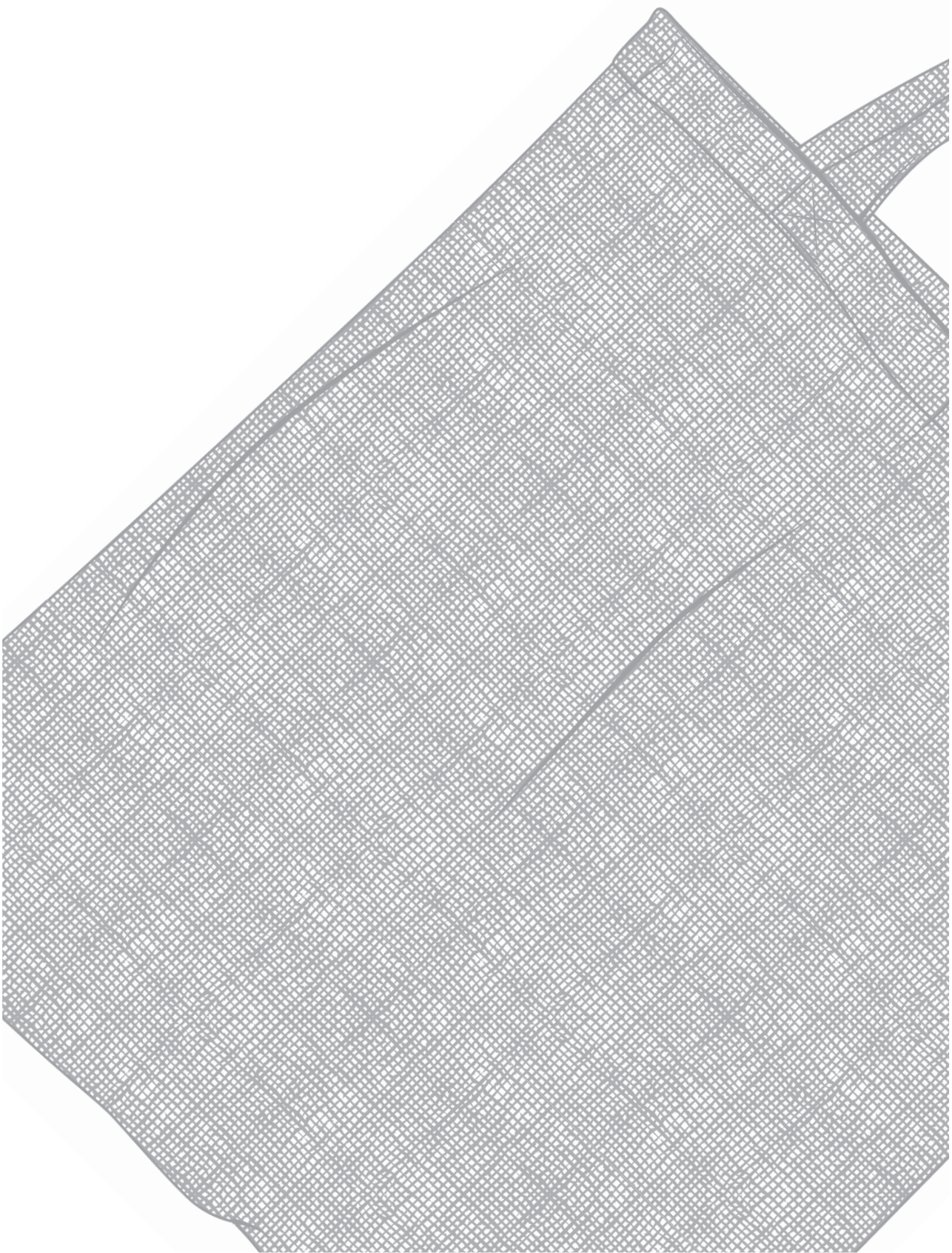
In chapter 5 '**Fermenting sterile desires**', I go further into one essential humanimal practice of Hegnsholt: feeding livestock waste food from restaurants and eateries. Within the chapter I am questioning: What can we learn, from the closure of the exchange of waste food, about 'theoretical risks of contamination' in relation to human-nature relations? How did Johanne respond to the closure and the tensions with the regulatory administration? What can we learn about reparative practices from microbic worlds and movements of bacteria? The administrative fear of bacteria and an experienced regulatory ambition for sterile environments are essential within this debate and negotiation. Introducing 'fermenting' with 'sterile desires' in the title of the chapter is about questioning what should be preserved, cultivated and changed from different human-animal and humanimal practices, and what kinds of imaginaries that could come out of that exploration.

In chapter 6 '**Tasting landscapes**', I explore urban-rural relations through taste and pleasure and the movements of food and food waste. What started as an interest in the eggs tasting of food waste,, made me question what kinds of transformative gestures and response-abilities could come from eating and tasting food? How does the kind of food from Hegnsholt seek to connect the urbanities of eaters with the ruralities of food producers? How do foods, such as those from Hegnsholt, invite us into the critical debates about the foodshed? In this chapter, I explore the questions of taste and pleasure from the acknowledgement that what we eat matters for the landscapes of food production (and in return). Eating 'response-ably' is a not a logical argument as in 'if we know, we will act accordingly, but rather a question of the cultivating affective, embodied and social knowledge that connects us with foodsheds. Lejre Municipality has an ambition to be seen as the pantry of Copenhagen, and this

has propelled some of the first ideas for the urban-rural relations. One of the first things I heard about Hegnsholt was the eggs with a significantly better taste as the chickens were fed on food waste; the eggs were so good that acknowledged restaurants purchased them. There seemed to be an exciting tension between an immediate impression of a pleasurable taste and a repulsive smell of waste. Within this chapter, I will explore how eating and tasting can connect (urbanities of) eaters and the (rural) landscapes, humans and nonhumans who feed us. I will focus on pleasure, enchantment and the slow mundane activist practices of Hegnsholt's storied food as transformative gestures that invite eaters into a reparative, cyclical and fertile foodshed. I am trying to think about landscapes reparatively and explore how to make urban-rural relations vivid, germinate, and valuable. I am studying the sensuous, social, storied and affective experiences with food and how this could cultivate an embodied knowledge that make us able to respond to environmental change.

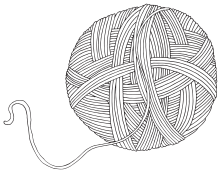
Chapter 7 '**Closure**' will, as the title indicates, conclude this research study by summing up and discussing what conclusions might be drawn.







2. Research design, material and strategies



With this chapter, I will describe, discuss and unfold the methodological and philosophical considerations and practices that are part of shaping this study. The study is founded in qualitative thinking and methods with a relational, situated and practice-oriented ontology (Haraway 1988, 1991; Massey 2005; McDowell 1999; Simonsen 2005). This understanding of knowledge creation depicts how research is always produced in specific contexts with certain experiences from a particular perspective, which also involves the researcher's relational body, professional and individual baggage. I will begin this chapter by unfolding this study's understandings of theory, methods, empirical material, (re)presentation, philosophy of science, interdisciplinarity, and the overall research design. In continuation of the writings about stories in the previous chapter (Introduction), I will unfold this perspective on stories and storytelling further and reflect on why stories matter. Within this section, I am suggesting a significant feminist and historical material kind of storytelling, the Carrier Bag Theory (Fisher 1979; Le Guin 1986). I have found this perspective notably helpful to communicate the values, thinking

and practices of Johanne Schimming from Hegnsholt Farm and Tina Unger from Lejre Municipality. Also, to me, this kind of storytelling makes room for a bio-social sensibility, in-coherences and cyclical time-scapes, and for an engaged perspective that, as mentioned in chapter 1 'Introduction', I have not found in a more classic narrative style. With his call for a 'lyrical sociology', Abbott (2007:74) depicts

That stance is engaged, rather than distant, and the engagement is an emotional one, an intense participation in the object studied, which the writer wants to recreate for the reader. Moreover, this engagement is not ironic; the lyrical writer does not place himself or herself outside the situation but in it.

Furthermore, the way I am working with stories also bring up questions of ontology and epistemology; whose stories matter, what matters as real and valuable, and how stories are essential to world-making practices, and the ways we write, communicate and present the studied is of the greatest importance. In relation to this study's focus on how to respond to environmental change, I am eclectively involving different perspectives on nature-culture relations, understandings of places and practices, affect and body, material and material relations, and ways of being in the world.

The section discusses the study's perspectives on the philosophy of science that forms the basis for the chosen methods, the collection of empirical material and how this material can be analysed and presented. Also, these understandings are connected to the four analytical chapters and will be discussed in relation to the empirical material in these chapters. From the ontological discussions, I will present the methodological considerations about doing research *with*. This section will describe the thinking behind ethnographic work, participatory and interactive methods inspired by action research, and describe and reflect on what I have done when, where and how. From that discussion, I will describe the empirical material that the studies found, and, finally, I will complete this chapter with how I am analysing 'it' and presenting 'it' in the analysis.

Some basic assumptions

Within this study, ‘theory’ is used to open up questions, issues, themes, and matters, and is, therefore, neither used as indisputable explanations nor as something that shall be confirmed, validated or falsified (Sjørsløv 2015:25–38). I am using theory **interdisciplinarily** (Enevoldsen 2012) and in relation to the empirical contexts. According to Enevoldsen (2012:36), interdisciplinarity works with the interaction or collaboration between specialised disciplines, but also moves beyond them and creates a system where there are no fixed limits between the disciplines. I am furthermore using theory and other sources **eclectively**; this a philosophical term that develops ideas from a broad and diverse range of sources and was an ancient philosophical practice of not belonging to one school, theory, or coherent thought, but rather drawing on different elements and directions from different schools and traditions. More recently, ‘speculative realism’ is a gaining grounds and reviving (Shaviro 2014; Stengers 2011), as this perspective questions the anthropocentrism that is central to the modern Western rationality, and questions the split between nature and human.

Shaviro (2014:1), who is working with Whitehead and who suggested ‘speculative realism’, argues that this perspective and kind of questioning is “urgently needed at a time when we face the prospect of ecological catastrophe and when we are forced to recognise that the fate of humanity is deeply intertwined with the fates of all sorts of other entities.” The speculative realism depicts that the world is composed of processes and an always becoming – everything transcends all the rest and in that sense, all occasions belong to each other (Shaviro 2014). The recent dialogues of speculative realism are all attached to ‘new materials’ and ‘the ontological’ turn, and due to the danger of the ecological and environmental situation, I am *inspired by* the questions they raise about the bifurcation of nature, epistemology and ontology, and about beings and becomings.

I work interdisciplinarily and eclectively as they provide an analytical attention to biosocial and multispecies sensitivity that I find particular-

ly fruitful in order to explore how practices with waste and food can cultivate response-able and reparative human-nature relations. Working 'tribe-disloyal' is as much to me about being curious and working across disciplinary borders as the ecological and environmental issues are. I try to be in particular places and stretch out time and histories, and I collect and drag on theoretical concepts and ideas, empirical experience and quotes, science fiction, journalism, cookbooks, poetry, statistics, social media, and reports. Hereby I try to add new layers to understanding how to respond to environmental change.

This approach has emerged from working with a particular set of entangled concerns (about environmental change, responses, materials, sites, and beings), and has then slowly been cultivated across the theoretical, methodological and empirical (Egmoose 2015). In continuation of this knowledge practice, the analytical process begins the day we start thinking about a research proposal, choose literature and fields, themes and people, and lasts throughout the whole study, and happens within ongoing shifts between normative, empirical, methodological and theoretical choices, reflections and acknowledgements. This means that the study's attention and ideas will develop and be adjusted abductively along with new empirical and theoretical experiences and realisations (Hansen and Simonsen 2004; Sjørnslev 2015).

It is my experience that this mode of choice and selection is not always rational and conscious, but can be impulsive, intuitive and sensitive, especially in situations of fieldwork and interviews. Furthermore, we need to engage these expectations and experiences and try to make the researcher's 'relational body' visible in the texts by describing and exploring the normative horizons, and the ontological, epistemological and methodological inspirations and principles (Abbott 2007; Fairclough, Jessop, and Sayer 2002). This involves attention before getting engaged with the field, during the work, and a sensitive retrospect about what then happened and reflection on the reasons why. I have tried to describe this 'selective' mind, whether it happens intentionally or by coincidence, in chapter 1 when introducing the

study, and I will address this even further throughout this chapter.

While some scientific traditions argue for a linear and deductive stringency, this study draws on anthropological, geographical and cultural analytical traditions, and it is essential for these knowledge practices that the truths the researcher 'finds' among the people and places that are studied, shall be related to a more comprehensive historical and theoretical story (Hansen and Simonsen 2004; Sjørsløv 2015:29–31). Philosophy inspires these disciplines – and my work – significantly, but what distinguishes them from philosophy is the empirical emphasis and the attempt to develop theory from an empirical basis. The anthropological, geographical and cultural analytical focus is, roughly written, about understanding relations in their many forms and scales, understanding the relation between the researchers and the researched, and trying to understand social, spatial and cultural histories and conditions.

As I want to involve more-than-human matters such as food waste, chickens and eggs, I also need to involve theoretical perspectives concerning biologies and ecologies, animals, embryo (egg), vegetables, farming, materials and materiality, welfare/well-being and affect, movements, with science and technology, veterinary, and epidemiology. It might sound like I am trying to understand everything, but to understand the entanglements and nuances, the small gestures and the more compressive relations, I believe these diverse matters must be taken into account as they have presented themselves in the situation. Therefore, I have on occasion added them to the Carrier Bag while I was walking.

Why stories and storytelling matter - Introducing the Carrier Bag Theory

Throughout the study, I have struggled to find the language, rhythms, and storytelling that could encompass and make me able to communicate what I found and experienced. As many researchers exploring unknown fields, I found the language I had to be immature, incomplete and materially naïve. Naïve as I was just getting to know

the matters and learning what to look for, and as I am finishing the thesis, I feel like it has just started to become more mature. Significantly, I have been challenged with how to methodologically and ontologically handle, but also write about, the food waste, chickens and eggs in this study. It has been helpful to work with the so-called material, object-oriented and ontological turns (Coole et al. 2010; Grosz 2011; Haraway 2016; Latour et al. 2018; Tsing 2015) and developing the work of the so-called 'argumentative' and 'narrative' turns (Fischer and Gottweis 2012; Freudendal-Pedersen and Kesselring 2016; Healey 1993; Sandercock 1999, 2003). In continuation of poststructuralist thinking, the ambition is to deconstruct Cartesian dichotomic thinking, for instance between the active human and the passive materiality, human and non-human, objects and subjects, nature and culture. Jensen (2016:592) depicts that "rather than advocating another 'turn' rediscovering materiality as something static and sedentary, there is a job to do in outlining a new 'material imagination.'"

I have found it helpful to work with theories that bring attention to relationalities and entanglements of humans and more-than-humans, and ontologically think about transformation through relations; theories that take materials and non-humans seriously while also taking stories and storytelling seriously. I have (Fjalland 2018) been interested in stories as methods and presentations, but through this study, due to the contexts, concerns and questions, I have found it important to develop the stories and storytelling I was familiar with. As I wrote in the introduction, my material did not seem to work with the linearity and unity of the narrative, and rather than discarding them, I have tried to develop 'what makes a story', mainly taking inspiration from Le Guin (among others 1986) and Abbott (2007). This is not about making a good story, but a way of writing and analysing that brings forward the studied and goes hand in hand with honest fieldwork and studies.

Questions and concerns of representation are essential within humanities and social sciences, and throughout the 1990s, a so-called 'crisis of representation' appeared in relation to the development of femi-

nist critiques of masculine science, postcolonialism, poststructuralist and postmodernist research and writings (Clifford and Marcus 1986; Le Guin 1986; Van Maanen 1988; McDowell 1999; Vannini 2015b). While the debates have cooled down a bit, new debates about writing cultures constantly appear, in terms of ontology, distance, nearness, human and non-human, and questions of how to enliven the researched material. But debates are also emerging in relation to new standards of publications; how (a) particular writing style determines which articles are published (Alvesson 2013). And the debates discuss how styles for writing cultures affect the 'presentations' of the empirical work, and question how specific writing styles might make us oversee essential aspects of the studied and block our imaginations, perspectives, and presentations of the cultures (human and more-than-human) we study and write about, because the language, story, and storytelling is too narrow, fixed or linear? The 'science wars' (that also took place in the 1990s) seem to have made each discipline fight for its own relevance and value, and, perhaps due to the current situation, it is time to reach out and invite interdisciplinarity.

There might be other expressive and performative practices, such as poetry, music, film, dancing, drawing, etc. that might be better at communicating and presenting the studied fields (Büscher, Urry, and Witchger 2010; Freudendal-Pedersen and Kesselring 2016; Ingold 2000; Pink 2006; Vannini 2015c). Their astonishing liveliness, relationality and embodied qualities should be of interest, appreciated and valued (Vannini 2015c:11), but although I used to be a dancer myself, I am wondering whether a scientific journal is a good dancing stage. Although this is a too obvious critique, because due to the current ecological crisis, we need to question the human non-human entanglements, and part of this is about the cultural imagination where words, sentences, and storytelling are essential. A bit more performance could be fertile, not to make a show but to learn to write more closely about the inevitable incoherencies, complexities, mutability, particularity, temporality, transcend-ability.

Writing and writings are what we as researchers (mainly) practice; words, sentences, and stories are what most researchers *do* and can be considered as explorative, situational attempts of getting a bit closer, reaching out, and making conversations about truths and realities. From a feminist perspective, this is an argument of whose stories are told and also what counts in the stories (Adichie 2009; Fisher 1979; Le Guin 1986; McDowell 1999; Sandercock and Forsyth 1992). According to Gabriel (1991), Sandercock (2003) and Czarniawska (2004), the power of narratives (and stories) is that they are linear, and straighten and simplify complexity. However, I would also argue that this is their weakness because, within this idea about what makes a story, it restricts *what* can be told, *how* it can be told, *who* it can involve, and what *matters* and is considered *meaningful*. This restricts the use of stories as methods as this may limit the analytical and communicative sensitivities. They draw on an understanding of what makes a story that draws on the Aristotelian sense of beginning, middle and end, battle, climax, conflict, revelation, and progress; about heroes (sometimes heroines) and stereotypes, and shall fit into an already acknowledged storyline/structure (Abbott 2007). This leads me back to the concern mentioned in chapter 1 'Introduction', about cultivating human-nature, biosocial, and imagination (Ghosh 2016; Tsing et al. 2017).

As I described in the introduction, I think there is an urgent need for different stories, storytelling, non-fiction, fiction, speculative fiction about alternative biosocial futures (Gibson et al. 2015; Swyngedouw 2010). According to Mikulak (2013:76), addressing the environmental and ecological crisis: "a profound shift away from this form of top-down, technocratic, disembodied form of knowledge" is absolutely necessary. Therefore, our scientific storytelling could need some 'dancing' tricks, and this is why words, stories and storytelling matter. We must search for languages that hold words and stories that spur the imagination for reparative futures and response-ability; of care, collaboration and compassion; and we must tell many different stories, track down old stories, and re-tell them (Gibson et al. 2015). We must nurture the capacity of being able to imagine and tell stories that push us to

question how else life could be like (Vannini & Taggart 2015: 18) and search for stories that invite us to rethink what our future might *feel* like.

The Carrier Bag Theory

Among other storytelling advocates, anthropologist and SF writer Ursula K. Le Guin suggests that the shape of a story or novel might be a sack or bag. “A book holds worlds. Worlds hold things. They near meaning.” (Le Guin 1986, 169). In her essay ‘The Carrier Bag Theory of Fiction’ (Le Guin 1986), Le Guin is inspired by anthropologist Elizabeth Fisher (1979), and suggests thinking of human history and self-understanding through the development of a carrier bag instead of an axe or another weapon. Central to the theory is that it seeks to tell *another* story about humanity. The aim is to reimagine rationality, sense-making, and normativity, and through this find our abilities to live and coexist on a damaged planet. Their argument is built on anthropological, material historicist and archaeological findings that suggest that before any weapon was ‘invented’, a thing that could carry and hold something else must have been developed. They also suggest that what had been expected to be archaeological findings of weapons, might have been tools used for cooking (Fisher 1979).

To Fisher and Le Guin, this particular material interpretation envisions that the interpretations always hold a perspective – and in relation to the time of Fisher’s book and Le Guin’s essay, they critique a particular masculine, white, privileged, Eurocentric, and imperialist perspective of interpretations. They question what would happen if women started to interpret these archaeological findings with their practices, perspectives, and situations. Supported by the recent archaeological findings at the time, some kind of carrier must have been invented and existed long before any kind of weapon. We do not know if it was invented by a woman or man, and that is not a point I wish to make. Historical materials have been studied and interpreted to try to understand who we used to be, how we lived together, and how we inhabited this planet, searching for human ‘natures’.

Instead of weapons of hunting and domination, Fisher and Le Guin place a kind of carrier or container in the centre of those questions and explore the humanities that could have invented this artefact.

What makes the carrier bag theory even more interesting is that throughout human history, gathering has been the most widespread and essential survival practice. Apart from a tiny group of inhabitants in the ancient Arctic regions, who hunted mammoth, seals and fish that provided their entire food supply, there is great reason to believe that the food supply consisted of 75-80% of gathered plants, fruits and vegetables in the Palaeolithic, Neolithic and prehistorical times (Fisher 1979; Le Guin 1986). Some kind of container, recipient or nest must have been essential to the gathering of these foods, Fisher (1979) writes, maybe initially this was our hands folding a curve, then a leaf, a small piece of bark or a shell to gather water. In order for them to survive, one must imagine that humans (indeed pregnant females and females with infants) had to develop a method to move with their children and gather food at the same time, or perhaps to bring food home to the group or temporal campsite. Fisher (1979) interprets the invention of the recipient to be “seen as fundamental in the evolution of a large-brained, two-legged human being. It freed the hands for gathering and provided temporary storage for food such as nuts and fruit. Moreover, the concept of the container was essential in the development of an infant sling.” (Fisher 1979:60). The sling freed and mobilised mothers, and it is interesting how this device disappeared from the civilised West with the invention of the settling, village life, and agriculture and was only revisited after World War II.

We've all heard it, we've all heard all about all the sticks and spears and swords, the things to bash and poke and hit with, the long, hard things, but we have not heard about the thing to put things in, the container for the thing contained. That is a new story. That is news.
(Le Guin 1986:167)

Despite that Le Guin wrote these words 32 years ago, I believe that they are most relevant to bring forward in these experienced times of

ecological, political and social crises (Gibson et al. 2015; Mikulak 2013; Swyngedouw and Ernstson 2018). The stories of the gatherers and the invention of a kind of carrier have, according to Le Guin (1986) and Fisher (1979), not been interesting or mattered, because of the power of single stories. What made the difference of the hunter-stories was not the meat, but how they dropped off, planned tactics, wrestled with the animal, some died, some (the leftovers) survived and these became the storytellers; this specific and particular practice was interpreted from a perspective that could reflect the construction of what makes a story a story (Le Guin 1986:166). Because, as Fisher (1979), Ingold (2000) Suzman (2017), among others, show, there many more nuances to hunting practices and much more compassionate, careful and collaborative attention between humans and animals than just domination and competition that also women (without infants and small kids) were a part of. Also, what they show is that it was particular interpretations of *big* hunts that brought forward the 'single' stories, and not the small hunts for rabbits or other small animals. It is the big hunts for big animals that could last for days and weeks.

Because of this dominant acknowledgement of what makes a story, the gatherer-life stories were not acknowledged as they lacked action, conflict, climax, and heroes; they lack a beginning, middle, and an end. Fisher (1979) argues that this story-building might not reflect the views and practices of those ancient times, but are to a greater extent significant colonial, Eurocentric, masculine and imperialist interpretations of hunter-gatherer cultures. Her argument is that it is more that particular view, rather than the practices and rituals themselves, that has propelled a certain 'Killing-Hunter story' and that that story reflected the worldview of the scientists at the time (1850s-1970s) (Fisher 1979:47-74). Recent research (Ingold 2000; Scott 2017; Suzman 2017) also shows another human-nature relation, and how hunting practices and rituals are surrounded by great compassion for the 'life that is taken', perceived as a sacred gift and therefore something has to be given back. As Le Guin wrote; "the trouble is, we've all let ourselves become part of the killer story, and we may get finished along with it. Hence it

is with a certain feeling of urgency that I seek the nature, subject, words of the other story, the untold one, the life story" (Le Guin 1986:168).

As I understand 'this life story' that Le Guin suggests, it is about the stories that continue, about collecting, gathering, sharing, collaborating, situated practices, small gestures, embodiments, and local sensitivity. Le Guin further writes how gatherer-life was about finding wild edible berries, plants and flowers, weaving and shaping the carriers, and "sing to little Oom, and listen to Ool's joke, and watch newts, and still the story isn't over. Still there are seeds to be gathered, and room in the bag of stars." (Le Guin 1986:170). Le Guin's and Fisher's argument is that this cultural artefact and the gathering practices change the stories about "who we are", whose stories matter, and what could also make a story. This can be summed up with Le Guin's words:

If it is a human thing to do to put something you want, because it's useful, edible, or beautiful, into a bag, or a basket, or a bit of rolled bark or leaf, or a net woven of your own hair, or what have you, and then take it home, with you, home being another, larger kind of a pouch or bag, a container for people, and then later on you take it out, and eat it or share or store it up for winter in a solid container or pit in the medicine bundle or [...] - if to do that is human, if that's what it takes, then I am human after all (Le Guin 1986:168).

The last sentence refers to Le Guin's and Fisher's critique of 'The Story of the Ancient of Man the Hero the Killing-Hunter', a story that is still told as the master behavioural pattern of human "nature", 20 years after Le Guin's essay and 30 years after Fischer's book, especially in particular competitive business lingo's and neoliberal tales that state 'survival of the fittest' and values competitiveness, the hunt, and domination. Altogether, I believe that the carrier bag theory suggests another scientific kind of storytelling that can address biosocial sensitivity, and reparative and response-able practices. As Le Guin depicts that thinking of cultural narratives along the invention and development of a kind of carrier bag would also reshape our interpretation of technology and science. This would entail that science

and technology would not be linear, reasonable progressive stories, but rather science and technology would be like cultural carrier bags of what really goes on between people and the world around them, how people feel and do, and “relate to everything else in this vast sack, this belly of the universe, this womb of things to be and tomb of things that were, this unending story” (Le Guin 1986:170).

From this perspective, a kind of scientific storytelling for a relational, situated and practice-oriented ontology can be propelled. This scientific storytelling is about giving space, words and sentences to the cacophonous, the becoming and living-on, the stories that actually do not finish and hold no apocalyptic climax; it is the stories about all collaboration, contamination, mutual aid, and compassion that are as present and real as the killing and devastation. Thinking of scientific storytelling using the carrier bag theory may help us to a language that enacts a biosocial connectivity, entangle us in the life of others, spur reflection, and draw us into deeper understandings of responsibility, reparative possibilities and livable futures (Gibson-Graham and Miller 2015; Gibson et al. 2015).

A relational, situated and practice-oriented ontology

The study behind this thesis is characterised by a qualitative and interactive research design and depicts a relational, situated and practice-oriented ontology. My aim is to describe how I understand my role as a researcher in relation to the researched and the kind of knowledge that comes from this research practice. In the next section (*Doing research with*), I will describe and reflect on what I did practically, how and why. This section is the more fundamental story of this study’s scientific perspectives on truths, realities, and perspectives, and this not only shapes the methodological basis, but also the foundations of this study’s central concepts: reparative, response-abilities and transformative gestures. These three concepts are ontologically and epistemologically informed or based within the relational, situated and practice-oriented thinking.

Questions of how we can know what we know

Simonsen's (2005) practice of ontology allows us to understand the relational body that is situated in time and space and constitutes a relationship between the body and the place. Simonsen depicts that the social world is composed of a number of relational practices and that people's consciousness and meaning-making are subjects of practice and shaped in practice (Koefoed and Simonsen 2010:53). In his studies of perception, Maurice Merleau-Ponty challenges the Cartesian subject concept by introducing the concept of body-subjects into his sensuous-phenomenology, where he links the practice and perception (body and consciousness) together and the experience that occurs. According to Merleau-Ponty, the living experience is located in the space between consciousness and body; an intersubjective space of body and perception, which places the perception in practice (Simonsen 2005:53). Perception, from this perspective, is understood as someone senses something, and this somebody makes sense to the sensed (Koefoed and Simonsen 2010:36). Perception is following an active practice, since 'it' is not an inner pre-given representation of an outer world, but an active and continuous bodily involvement - as to hear, see and feel.

The human body thus holds a dual character, which is at one time a means of perception (someone senses) and a perceived object (shared with others) as the body-in-world (Simonsen 2005:53). From this perspective, the body's relational elements are introduced; that we react and relate to each other's bodies. Perception is an opening out towards and an involvement with the other, a dialectic relationship between the body and its environment, which simultaneously constitutes both subject and object (Koefoed and Simonsen 2010:37). The world is therefore regarded as shared, and with a subjectivity that is publicly available: subjects are understood as susceptible sensory bodies whose subjectivity assumes embodied and public forms. This embodiment and the relational body emphasises that the world is shared, entangled, and always already relate to each other through other historical, social, biological and situated bodies.

There are observers and participants that always are bodied: researchers have bodies that are able to see and get engaged, and these bodies are not invisible while getting engaged with the fields. These 'bodies' are also in-the-world and affect the meetings with the fields and people. Bodies reflect and are embodiments of historical, social, cultural, class, ethnic, sexual, material, and gendered aspects (Simonsen 2005). It is a perspective that argues for active beings and bodies that are made or always in the making rather than static, natural and fixed. The body's mould-ability and ability to take different shapes in different situations is an understanding of the relational body that rests on a break with the Cartesian dualism and subject concept. This conceives the subject as a universal, neutral, genderless entity in which consciousness and body are separate matters and is understood as a bodiless, intangible entity, and the body is a material entity that consciousness sticks to (Simonsen 2005:52). Simonsen (2005) uses the French author and feminist Simone de Beauvoir's understanding of the body as a situation to counterargue the Cartesian dualism between biology and historicity.

From this perspective, the body is one situation among many others: class, nationality, biography, location, and relationship with other people. However, it is a fundamental and existential situation, as it forms the basis for our experience of ourselves and the world we are engaged with, and the body will thus always be part of our living – and research – experience (Koefoed and Simonsen 2010:42). In this way, the body is both a factuality and a project and, as Simonsen (2005:56) argues, the meaning of a body is associated with its projects in the world and simultaneously characterised by all other situations it is part of, as there are countless ways to live with the specific bodily burdens and potentials that a body has. I find this understanding of the relational, situated and active body-being meaningful in order for us to understand the concept and project with response-abilities, reparative and transformative gesture as beings and bodies are understood as 'able' (not passive).

We should bear in mind that we (humans and non-humans) are not able in the same ways and have different conditions for responding,

and these differences matter. Sayer (2005:11) describes how we are beings who are able to suffer as well as to blossom, and that these experiences and abilities are sometimes independent from how suffering and flourishing are culturally and socially construed. There are aspects and elements of realities that cannot immediately be felt, sensed, observed or understood, but that does not mean that 'it' is not there. They are independent from our minds of construction, but not unaffected by our actions as we are in it together. Everyone, everything and every process hold 'abilities' that are there regardless of being triggered or not (Fairclough et al. 2002). We might know a language without speaking it; we are able of loving without loving anyone; a seed has the ability to become a vegetable. This thinking has given rise to the idea about the possibility of germinating, of the reparative abilities: Matters and beings are capable and hold significant abilities within themselves, but for them to germinate life-giving conditions, others and collaborations are essential, and the seed might grow, mutate, rise or sprout, or become something else through these different conditions and collaborations, or it could stay inactive. From this study's philosophical perspective, a single and true reality does not exist, and realities are becomings, relational, situational, and mould-able.

A more-than-human perspective

As we are always with and entangled with the other, I am adding that this might also involve the other more-than-human inhabitants of the Earth. As our bodies are sensuous and affective and can never avoid relating with the surrounding world, we might explore how humans relate with non-humans, such as waste, food, and animals (part of this particular study). Hastrup writes regarding the involvement with non-human materials, matters, and processes in anthropology:

For anthropologists today, the practical work implies directing their skills of attention towards the complex meshwork of human life as lived, and towards the worlds emerging from that life, striving to understand people's actions in the *same* way as they do (Strathern, 1990: 10); this challenges conceptual dualisms which may potentially

destabilize anthropology, but also open up for unprecedented insight. (2014:3) [...] I am not sure we need to make that claim¹, certainly not when things are natural forces as dealt with here. Once we have acknowledged the entanglements of elements, forces, natures, things, organic and inorganic materials, people, places, concepts, and imaginations, we need not to take any particular position except the one that offers the best view to a particular concern. It is from that position we may integrate ferocious facts into our theories about world-making (2014:18–19)

I am inspired by Hastrups' more-than-human invitation and the work of anthropologist Anna Tsing (2014, 2015), who studies ecologies, forest history, post-capitalist landscapes and corners of capitalist commodity chains through the Matsutake-mushroom. She follows Matsutake-mushrooms through the forests they inhabit, their global movements through commodity chains, and the peasant workers and traders that work with them. Tsing insists to take more-than-human sociality and multispecies collaboration seriously and shows how it is not only humans who make living worlds and builds this knowledge by studying the entanglements between human labour, natural 'resources', ecologies, and movements. From these perspectives, I explore what we can learn from these human and non-human practices at Hegnsholt Farm in Lejre and Copenhagen, Denmark, but also beyond these localities (Massey 2005; Pink 2012).

A way to observe the 'well-being' of chickens might involve trying to understand their communications. We can think of language as an exciting force that marks both the body that can release song and sound and its relational possibilities as it might connect to those who hear it. Using Darwin and Deleuze, Grosz (2011:19–20) write:

Language is not the uniquely human accomplishment that post-Enlightenment thought has assumed, but, for Darwin, is already a tendency, residing within the voice and in other organs capable of resonating sound, to articulate, to express, to vibrate and then in some

1) Hastrup refers to the post humanist position.

way to affect bodies. [...] The living body is itself the ongoing provocation for inventive practice, for inventing and elaborating widely varying practices, for using organs and activities in unexpected and potentially expansive ways, for making art out of the body's capacities and actions.

I highlight this, not to exclude the human 'thing' that expresses itself through language, but to explicit the interconnectedness of meaning (sounds) and matter (bodies) and relations, and that this ability of communication is not solely for humans. In the chapter 'Humanimal relations', I will go more into the chicken-communications and place-making practices at Hegnsholt. Language itself (semiotics) embodies, includes and reflects bodily, practical, non-semiotic, even non-social dimensions of human practices and abilities. This is an idea that suggests that we cannot understand the human without understanding the non-human environment. The biospheres and atmospheres that we are a part of and participating with, embodying us through eating and breathing (amongst other things) and we embody them, are not only a trifling/feeble scenic background set for human acting. They are forceful, unstable, and fully incomprehensible agents that without (humanly known) warnings, rapidly and in mysteriously slow moves intervene and embody humans (Barad 2003; Gregersen and Skiveren 2016:1, 2; Haraway et al. 2016; Morton 2013; Tsing 2015; Tsing et al. 2017).

Questions to the so-called Anthropocene

The companions of the Anthropocene - climate and environmental changes - have given rise to reopen and curiously investigate relations between humans and their surroundings. This must lead to a change of perspective and innovation of the humanities and social sciences that currently are, according to the materialists, maybe a little too human. (Barad 2003; Coole et al. 2010; Gregersen and Skiveren 2016; Grosz 2011). Ecology and environment are commonly questions of natural sciences, but as human actions and systems to a greater extent seem to transform these, interdisciplinary thinking going across the natural and social sciences, and humanities is needed. An

attention towards the spaces, non-humans and humans is one that human and cultural geography has a tradition for and have shown how qualitative nuances of the humanities and social sciences are valuable in relation to these to 'natural' matters, materials and processes. The idea of humanities as the sciences of "human as a literary, linguistic, philosophical, historical, and cultural variable being. [Humanities] remain irreplaceable to the extent that these questions have not been and perhaps cannot be addressed through other knowledges." (Grosz 2011:15). I am suggesting that if we ought to enhance a livable future, a livable now, these particular entanglements must be understood along with understandings of how and why we came to this moment. Coming from a humanist background, I find Grosz (2011:21) suggestion for a new humanities in relation to becoming able to respond to environmental change helpful. She suggests a humanities that:

come possible once the human is placed in its properly inhuman context. And a humanities that remains connected not only to the open varieties of human life (open in terms of gender, sex, class, race, ethnicity, nationality, religion, and so on) but also open to varieties of life (its animal and plant forms) is needed, one that opens itself to ethologies and generates critical ecologies.

This critical situation of changing ecologies, environments and climate, most likely affected by human actions, call for studying the relations between the human and non-human, not that these are two entities by any means. In terms of the philosophy of science, this also opens ontological questioning of the human sense of self, world-making-practices and its relation to the non-human worlds, today and historically. Part of the situational thought is a significant relationship between body and space, and according to Simonsen, the body is always a place that is spatial (Simonsen 2005: 57). The body inhabits time and space, we belong to space and time, and our bodies combine them and includes them (Simonsen 2005:57). The body is in constant motion and involves time and space in the active construction of a meaningful world to which a close connection between matter and meaning, between material and ideal strives to be maintained (Simonsen 2005:57).

Simonsen elaborates on this with Henri Lefebvre's work on social practice and the production of space. Lefebvre's rhythm analysis focuses on the body's periodic rhythms and its internal and external relationships. Rhythms are tentatively defined as movements and different observations that connect different tides. The place is both localised and temporalised, and maintains the temporal character of the rhythms and their involvement in the production of space (Simonsen 2005:46, 59). In line with a critique of the social sciences for being fixed, Sheller and Urry (2006) called for 'mobile methods' that could measure the changing nature of time, space, and motion, and capture these dynamic mobile processes. Processes that the movements of food waste between Lejre and Copenhagen could be an example of, but also a process that embraces the global-local movement of knowledge and ideas, and reparative place-making practices (Büscher et al. 2010; Massey 2005; Pink 2012).

The body is essential for the lived experience, where the body constitutes a practical sensory field in which space is perceived through smell, taste, touch, and hearing (Koefoed and Simonsen 2010:44). The body produces a space that is both biomorphic and anthropological, and the relation with the environment takes place through the dual process of orientation and demarcation, practical and symbolic. This process can generally be described as the spatial-body whose material character derives from the bodily energy that is redeemed and is used in space. According to Lefebvre, the energy of the body refers to a 'Dionysian' aspect of existence, where play, struggle, art, party, sexuality, and love are part of the necessities and potentials of life and transgressive energies of the body (Simonsen 2005:58). The energies bear the ability to transcend the everyday life of modern life and result in active participation and the acquisition of space.

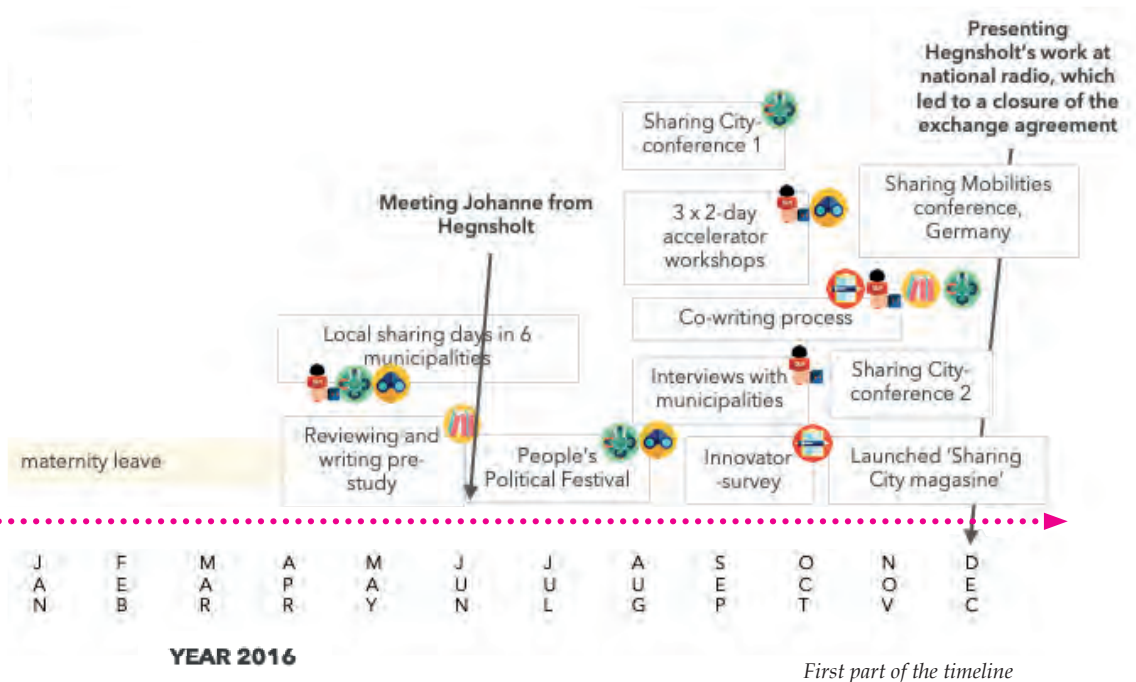
This is a perception of the human abilities that speaks for a creative and generic bodily-practice. These thoughts on relational energies, the embodiments, are most interesting in relation to one of this study's objects - food - and how we relate with these matters, how they also affect, inhabit and embody us while we 'eat'. These engagements can

be perceived as *essential* human-nature practices and meetings, not just because we need to eat to survive, but when we eat and sense the food, we become more explicitly connected with the ‘other nature’. Within this study, a relational, situated and practice-oriented ontology refers to a bodily or practical knowledge that emerges in the everyday lived life, it is about a world of feelings, desires and notions and the countless encounters through which we at once are created by and are part of creating our surroundings (Koefoed and Simonsen 2010:35–36; Simonsen 2005:52). This understanding of a spatial body that is affected by and affect surroundings makes it possible for us to understand transformative gestures of eating, tasting and talking about the chickens and eggs from Hegnsholt Farm; it makes it possible to understand how eating, as a survival and pleasurable practice, relates to landscaping practices – how eating also is a place-making practice involving ecological and environmental concerns.



Doing research *with*

From these more fundamental considerations in the previous three sections, I will now be more concrete and contextual about the methods and approaches used within the study and the relations between them. In line with a relational, situated and practice-oriented thinking, it seems rather unavoidable or obvious to do research *with*, because we can never be outside of something, but foremost this methodological choice is based on an acknowledgement that contributes with knowledge that seeks to address particular societal problems, one needs to get close and involved with the practices themselves. Problem-oriented research centres around a particular question where a researcher is constantly inclined to find, specify, analyse and solve knowledge gaps (Bitsch Olsen and Pedersen 2003). These knowledge gaps should be theoretically and empirically informed, and not be about the endless theoretical gab spotting that Kärreman and Alvesson speak against



(2011). The argument of interdisciplinary, in a way that is eclectic and problem-oriented, research is furthermore based on the acknowledgement and assumption that the world is complex and entangled, not defined by scientific disciplines, and to address the problems and challenges of the complexities, you need thoughts and thinking from different disciplines; the more complex the issues are, the more important it is to have a manifold and broad insight. Researching *with* is altogether inspired by methods from participatory ethnography and action research.



This is a picture of me taking notes and talking with Heino Smed Sørensen, one of the founders of the application 'My Village' (in Danish, Min Landsby), who ended up being one of the 24 innovators. He is explaining what they do and is showing me the different features of their prototype 'app', and from this, we discussed his motives and concerns for developing it. They started the app and organisation as a response to a Danish national debate about urban-rural polarisation and to show that life in rural regions is not 'dead'. This took place at the Local Sharing Day in Nyborg. The photo is taken by a colleague of mine.

In the introduction, I have described how I first encountered and became engaged with the Sharing City Project, the Program Manager for Food, Business, and Sustainability at Lejre Municipality, Tina Unger, and the farm Hegnsholt run by Johanne Schimming. This study has

primarily grown and been cultivated from a concern of how to respond to environmental change, and the choice of empirical contexts and collaborations have developed in accordance with this concern. Choosing the empirical contexts was not logical or linear, as in this is the particular problem followed by a comparative consideration about who 'best' could tell us something about "it". The empirical partners and contexts were chosen more from a conjunction of particular circumstances and relations. Also, the research questions to the studied have also emerged from the engagements with the empirical contexts. This research project started with the environmental concern in mind and a curiosity in the sharing economy in relation to sustainability, planning, and governance. As we built up and conducted the Sharing City Project at the Danish Architecture Centre (DAC), the other two empirical partners appeared, and our collaboration began. With the two timelines on the following pages – one for 2015-2016 and one for 2017-2018 – I have to tried to illustrate the process, significant events, actions, and methods.

During the Sharing City Project, I was actively involved and gathered knowledge throughout the project with ethnographic participatory methods (illustrated with binoculars in the timeline) at local sharing days, 'accelerator workshops', through case studies, qualitative interviews with the municipalities (illustrated with a microphone), a qualitative survey with the 24 innovators (illustrated with a paper and pen), and collaboratively developing the knowledge through co-writing processes (the figure of illustrating people around a desk). All of this was primarily used to make the 'Sharing City Magazine', but the experiences and accumulations were furthermore essential for developing and maturing ideas about sharing, commons, and stories for this research study. This material is used, elaborated and discussed in chapter 4 'Stories of the Sharing City', although the conversations and interviews with Tina from Lejre Municipality are used throughout the whole analysis. When I came back from maternity leave in April 2016, the Sharing City Project had been designed and it's official start date happened to be on the same day. The first day was a Local Sharing Day in the municipality of Copenhagen, where politicians, officials, civil



Illustration of the different partners of the Sharing City Project

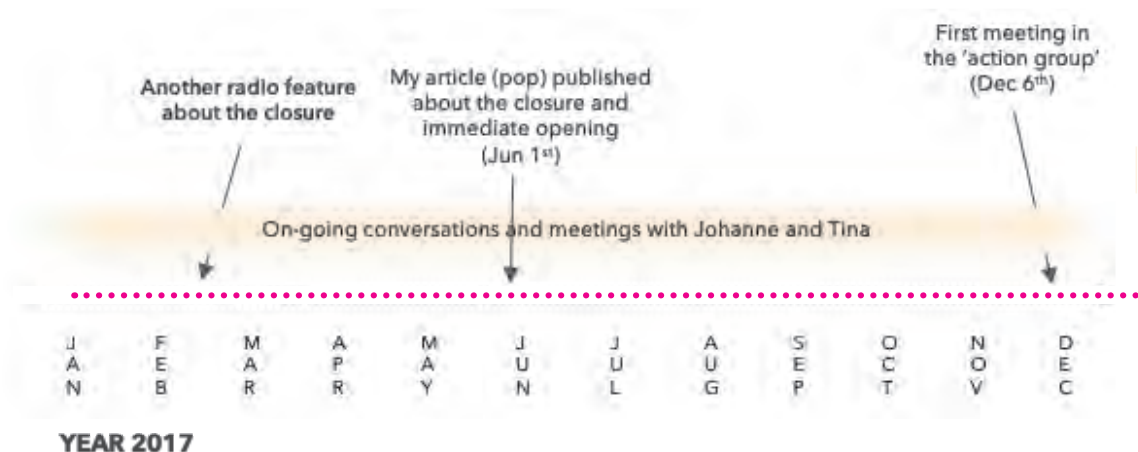
organisations, associations, and different entrepreneurial and established businesses attended. With the support of the DAC, each municipality hosted a Local Sharing Day that also related to the Global Sharing Week which is an annual event, every first week of

June.² The Copenhagen event took place earlier in relation to some other practicalities, that I am not aware of. In April, as I came back from maternity, I didn't know yet how I was going to use the information from the Sharing City Project and the different research projects, or, more significantly, what I was looking for. I started taking notes about the different ways of understanding and working with the sharing economy, basically from a question of how this undefined, fluid and vague phenomenon was situated and given shape within local Danish practices, inside and outside the municipalities.

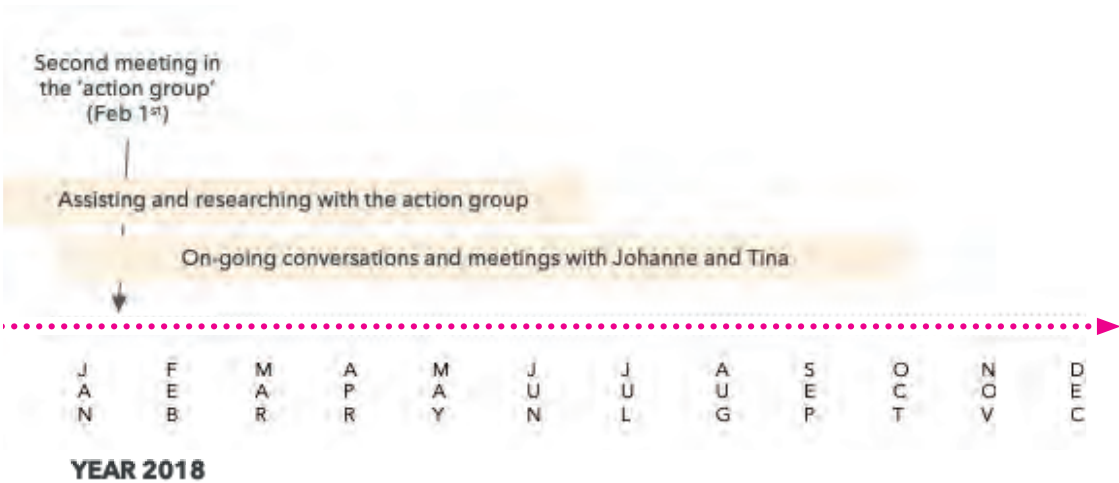
In relation to the work that I did with the Danish Architecture Centre, I had to collect knowledge and cases about the sharing economy in relation to urban and local governance issues, which later would be used to make a report. First, we had to do a pre-study that would work as inspirational material for the municipalities, drawing on international cases and projects from Amsterdam, London, Seoul, and San Francisco, amongst others. When I say we, I mean me and two consultants from Rambøll Management who were involved in the project. There was also a scientific committee connected to the project with whom we (me and the two consultants) had to present, discuss and validate the work. This committee consisted of Mark Lorenzen, geographer and professor at Copenhagen Business School; Bent Greve, economist and professor in Public Administration at Roskilde University; and Martin von Haller Grønbæk, partner and lawyer at Bird & Bird. The following illustration is an attempt to visualise the different actors involved in the Sharing City Project's research team (at the bottom), and who and what we studied. The seven municipalities are portrayed on the left and the 24 innovators on the right. On top and in the middle are the seven themes that had emerged from dialogues with the participating municipalities (while I was on maternity leave).

I will not go further into how the Sharing City Magazine was developed, but I cannot separate the accumulation of experiences, stories and information from the research project.

2) For more information check out the website: <http://www.globalsharingweek.org/>



We did a survey with the innovators, and I initially used Hegnsholt's responses and descriptions as background information, but as Hegnsholt developed I used information from collaborations and conversations that we had after the Sharing City Project had finished. As part of the Sharing City Project was to develop the Sharing City Magazine, a consultant from Rambøll and I interviewed the municipal actors from the seven municipalities, and I will use quotes in the analysis that also appeared in the Sharing City Magazine. The sections about the municipalities in that magazine were based on these semi-structured interviews, where questions were given beforehand. The idea was to write an article for each municipality about their practices and thinking around the sharing economy in relation to their local, municipal context. These articles were then sent to each of the municipal actors for editing to ensure they could recognise themselves within the written text. As part of these interviews, we interviewed Tina Unger in October 2016 and I will use this material in the analytical chapters and will describe this further in the section 'conduction interviews'.



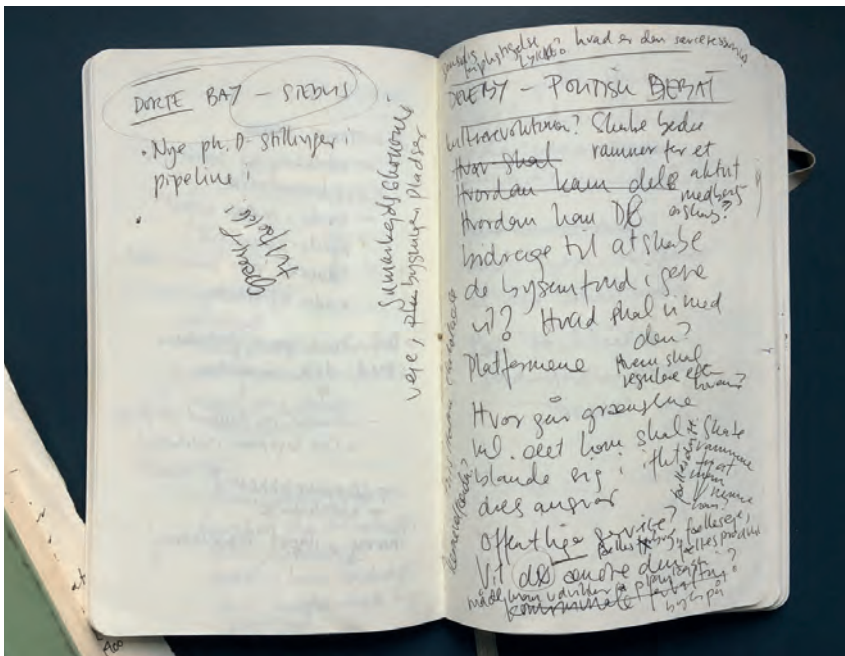
Second part of the timeline

When the Sharing City Project finished in November 2016, I took up and continued the dialogue and collaboration with Tina Unger from Lejre Municipality and began the work with Johanne Schimming from Hegnsholt Farm. As mentioned, one of the significant turning points happened when the exchange of food waste between Hegnsholt and the Copenhagen eateries was closed down by the authorities in December 2016, after a national radio feature where I had introduced their work and the exchange as a kind of sharing economy. From December 2016 to October 2018, the methods took on a character of interactive research and involved participatory methods, ethnographic observations and conversations, and qualitative interviews.

Combining ethnographic and interactive methods

As the first timeline illustrates, a number of events, seminars, debates, conferences, and workshops took place throughout the Sharing City Project. At these gatherings, I observed and talked to various municipal actors about what they found interesting and relevant with

the sharing economy, and what kinds of societal and environmental perspectives they tried to address. We also talked about what had motivated them, what led their desire and their dreams, and somehow the sharing economy unfolding during and within the Sharing City Project was surrounded by an atmosphere of transformative and hopeful inventiveness. The dialogues could take a few minutes or be longer conversations, some I only talked to once and others I talked to several times from April to October 2016. While we talked, I took short, descriptive notes in my notebook: words that would indicate and send me back to situations and recall conversations, but also present issues and questions that the conversations opened.



An example of notes taken from a conversation at one of the seminars

I attended the events with the team from the Danish Architecture Centre (DAC), and was presented as from this organisation. The DAC was co-hosting the events and I also helped out with different practicalities, mainly to assist and become part of the organisations rather than

observe from the outside. At the midway-conference, I had to present my findings so far. When I started the conversations with municipal actors and innovators, I had felt a slight reservation at first, especially from the municipalities, and I made it clear that I was a PhD-student and only there to study the different perspectives and practices of a sharing economy. I also expressed that I was not there to judge or value whether their participation was in accordance with whatever the DAC might have expected from them. I also introduced myself as a PhD-student to the innovators and, as with the bonding with the municipalities, this information somehow helped open the conversation and created some trust. This came as a surprise as I had feared that the narrative about university researchers 'who know better' would distance us. These reflections on how you introduce yourself, on the connections made and trust initiated are central to the ethnographic methods.

Anthropology has also looked at the everyday and close cultures with which ethnography has evolved, and reflexive ethnography is qualitative and context-focused where deep rather than broad knowledge is the aim. The knowledge produced by this method is always subjective, constructed and partial, thus denying realism's aim of a neutral and invisible ethnographer (Larsen & Widtfeldt 2012: 311). The reflexive ethnography is engaged with experiencing, observing, understanding, describing, analysing, and communicating how humans and non-humans relate with each other in specific situations and in certain places (Sjørsløv 2015). I kept this focus significantly throughout the Sharing City Events, and was part of shaping the thematic frameworks for the two big Sharing City conferences, the four debates at the People Political Party, and co-made the survey for the innovators as well as the questions and themes for the interviews with the municipal actors (see timeline 1). Throughout the actual events, I took pictures, made notes, talked to everyone and made myself available to become part of the field. I also presented the findings at the two conferences, which opened up the conversations and debates with the innovators and municipal actors. I was very humble and curious about their thinking and doings, and it was my mission to ensure a collaborative-atmosphere-

re where they could feel close and part of the writings and findings. When I was putting together the material for the Sharing City Magazine, I was very keen to make the material open for collaboration with the innovators and municipal actors. I sent them the texts, and while it was very time-consuming, it was important to me that they also felt like it was their texts and that they could see themselves within it. The objective, neutral writer was not part of the Sharing City Magazine.

Along with the ethnographic methods, I was also inspired by action research methods. There are significant differences between the Nordic and American traditions for action research (Aagaard Nielsen and Svensson 2006; Bradbury-Huang 2010). What I am inspired by is the value of creating knowledge and change in collaborations between researchers and other professionals, and that it is “richly contextualized in the local knowledge of practitioners.” (Bradbury-Huang 2010:94). Bradbury-Huang depicts that “to reiterate, action research *with* practitioners *always includes* practitioners as partners in the work of knowledge creation” (Bradbury-Huang 2010:95). This was the guiding attitude with which I met the municipal actors and innovators throughout the Sharing City Project. Later, when I chose to work closer with Johanne Schimming from Hegnsholt and the action group, I was no longer part of the design and construction of the meetings or conversations. I did define the problems and frameworks for the conversations, but followed them and participated in dialogues and work and let them define what they believed that I could contribute with. I kept up the conversations with Tina Unger at Lejre Municipality, and through our talks, I mainly guide the conversations as I had questions and thoughts I wanted to discuss. But we also ended up having much less structured dialogues and went for walks around Lejre, where she wanted to show the fields around Herslev Brewery. In my dialogues with Johanne and Tina, I have also been open about my own concerns and discussed my work (the research) and writings (for the research) with them.

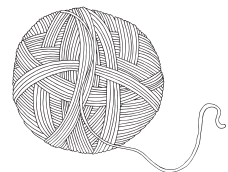
My role within the Sharing City Project, a role that was developed and agreed with the project team at the DAC, was to gather and or-

chestrate knowledge about the sharing economy within the project. I did not design the overall settings and aims of the events, but I was very concerned with trying to create a safe conversational space, where we could explore and generate ideas with the collaborator. I was very explicit in saying that they were as much ‘experts’ on the sharing economy as me and that we together were trying to find out what this phenomenon was about and how it could be meaningful in a Danish municipal context. I also involved them in my thoughts and reflections on the matter. During September and October 2016, we (me and an external consultant) conducted some qualitative interviews with the municipalities that would be used to understand and sum up the final experiences that were to be communicated in the final report of the project. The interviews took place in the municipalities, they were recorded and from them, we wrote a one-page article that was sent to the municipalities for them to rewrite, cowrite and comment before they could be published. To a large extent, I consider the writings and publications of the Sharing City Project as “middle-writings” that are more coherent writings that seek to mature some of the ideas and analytical perspectives (Bundgaard and Mogensen 2018).

Another essential aspect of action research is that it is concerned with creating social, political, cultural and/or environmental changes. As municipalities in Denmark are political actors and as the central question of the Sharing City Project was to explore how the sharing economy would help create better cities and communities, I think the transformative concerns of action research were in continuation of the empirical practices. For the research study (not for the Sharing City Magazine), the chosen empirical partners were concerned with “relevance, social change, and validity tested in action by the most at-risk stakeholders” (Brydon-Miller, Greenwood, and Maguire 2003:25). This was furthermore and foremost significant in my work with Tina from Lejre Municipality, the Hegnsholt Farm, and the little ‘action group’ that Johanne gathered to try to reopen the exchange of waste food between the farm and the Copenhagen restaurants and eateries. In terms of this specific engagement, inspiration from aspects of action research is helpful as

it involves a variety of research practices that, through research and cooperation with social change processes, work on research processes engaged in the fields they study (Brydon-Miller et al. 2003). Bradbury-Huang writes that the knowledge creation that occurs within action research is based on creating collaborative relationships. Within these relations common learning processes, horizons for actions, exploration of common understandings of issues and capabilities to enter into change processes are essential concerns (Bradbury-Huang 2010).

I was invited as a researcher to this action group, but also due to my interest in assisting and engaging with the 'action' and meeting with Johanne (Hegnsholt). Together with the two other partners of the 'action' group – Christian F. Puglisi (Relæ Community) and Karen Hertz (Grønvirke Communications) –they had set up a space for conversation and aims, and my role was observatory and participatory. As the second timeline illustrates, I had meetings and conversations with Johanne and Tina on a regular basis from December 2016 to October 2018. I have had more contact with Johanne than Tina, and this included fixed meetings, but also through several informal phone calls and co-writings via different media. Johanne and I have been in contact at least twice a month either by phone, SMS, e-mail, in person, or through social media. With Tina, it has been a little less. Essential to our conversations was what was happening with the 'closure' of the exchange relation with food waste, addressing environmental change, agricultural practices and rationalities, and what was being done by whom and why, desires and dreams about the future, and the concerns, frustrations and sorrows that come with environmental concerns and the ongoing conflict with the authorities. All in all, I will argue that the knowledge creation process has been a mutual collaborative project, where I as a researcher and woman have participated in the change of other practice fields (that I felt very related and concerned with) and where the practitioners have participated in the development of my research interests and writings.



Reflections on getting engaged, nearness and distance

For both ethnographic and action research inspired methods, it can be said that this knowledge creation “rejects the notion of an objective, value-free approach to knowledge generation in favour of an explicitly political, socially engaged, and democratic practice” (Brydon-Miller et al. 2003:13). One of the key themes of these methods is empathy (Hansen and Simonsen 2004:120) and humane sympathy (Abbott 2007:94–96). These participatory and interactive methods are about researching among people to understand their ways of living, and are methods based in the ontological perception that people are relational and always in dialogue with their surroundings, human and non-human (Hastrup 2010; Hastrup, Rubow, and Tjørnhøj-Thomsen 2011:26; Sjørsløv 2015). Moreover, Brydon-Miller et al. highlight how a key value shared by action researchers is an “abiding respect for people’s knowledge and for their ability to understand and address the issues confronting them and their communities” (Brydon-Miller et al. 2003:14). The engagements and the relations that are built up over time might even become friendships that continue after the research project ends. Our human abilities to make these relations, to care for and be concerned with each other (the relational body) are also something that can make it difficult for you as a researcher to *distance* yourself critically from the material. Consequently, there will be gaps, questions and acknowledgements that I might overlook, despite my attempt to be as explicit about the ontological, epistemological, methodological, and normative considerations as I can. In continuation of these concerns, Brydon-Miller et al. highlight how:

We seem unable to resist ‘embodied’ intellectual practice. We never leave our corporality; we are engaged in ongoing cycles of reflection and action in which our bodies and ourselves and those of our collaborators are not only present to us but essential to the very process of understanding messes. Pain, joy, fear, bravery, love, rage – all are present in our action research lives (Brydon-Miller et al. 2003:21–22).

One of the central methodological practices of ethnography is namely *participant observation*, and, as mentioned, this has been a central met-

hod throughout this study. As the name suggests, the method possesses an inherent contradiction (oxymoron) as it requires participation that is involved and engaged, and at the same time an observation that seems to require an outside, some distancing. Thus, it is about giving oneself up without getting absorbed; it is a delicate, difficult relation and balance of nearness and distance (Hastrup et al. 2011:32, 62). Earlier I mentioned Abbott's (2007) argument for an engaged writer that is in the situation, and not outside of it, a particular writer in a particular place. There have been moments throughout the fieldwork where I have felt an overwhelming urge to give up the academic work and engage myself fully into the work and actions within agricultural practices, but my family life at the time kept me at a distance from doing so. But then we bought a house with garden, and through my own food and waste practices and consumptions I became even more alert to things I experienced in the study, and this appeased the desire a bit. Another 'relief' was when I got engaged with the action group initiated by Johanne, where I also felt I could share and 'do something' about my own environmental anxieties. I had something to contribute to this group, and to feel that we were contributing together was a positive change from the deskwork I experienced as rather passive (sometimes paralysing). The community I was invited into and got engaged with helped nurture my own response-abilities, and while they might be unaware of it, this also helped me to get through a rather lonely PhD life as books were supplemented by living companions for a while.

In this specific study, food and waste are most familiar everyday practices, but engaging in these matters *with* Johanne and Tina helped me understand them in new ways and made them appear very differently. The farm, agriculture and rural politics, and landscapes were new research fields for me, and I arrived with fresh eyes, but not without baggage. I came to these fields from a humanist perspective with an ear sensitive to stories, histories and cultures, ethics and co-existence, and an eye attracted to materials, aesthetics, designs and spaces. According to Sayer (2011:6, 16), our normativity and moral should work as a catapult for curiosity and wondering. Not to moralise or

to judge (Abbott 2007:74), but to let the respect and curiosity of other people's practices and thinking be open and let your normativity be your travelling companion throughout the whole research process. This is a specific perspective on the philosophy of science that argues that we are never untouched, as our relationship with others is always tuned, evocative, and in search for a kind of alignment (Koefoed and Simonsen 2010:48). In relation to the researcher-researched settings, the meetings are inevitable mutually affective and I would argue that ethnographic, participatory and interactive methods are about making yourself available through sensing, being attentive and thoughtful, and from this try to expand our understanding and ability to describe these (unruly) worlds. Then, as a kind of distancing, I am trying to practice this through the questions I am posing.

Conducting qualitative follow-up interviews

The empirical material is made of from all the conversations that were had throughout the period the study lasted time of the study. The conversations with Tina and Johanne, whereas supported by three semi-structured qualitative interviews (Kvale and Brinkmann 2009). These three interviews, one with Johanne and two with Tina, had an explicit guide of questions/themes and whereas recorded, and there was one with Johanne and two with Tina. I made this choice at a point when I felt insecure about my methods and felt like these could work as back-ups, and but they ended up being really valuable conversations that due to the formal setting, gave provided more time to the details of dreams and thinking. These longer and deeper conversations created the foundation from which we rather quickly could take up rather abstract and emotional conversations over the rather quickly over the phone. The interviews lasted around 1½-2 hours, and the interview with Johanne in March 2016 was in her home at the farm, and the first interview with Tina was at the DAC in October 2016 with the external Sharing City -consultant, and the second one in was done in her home in November 2017. The interview -guides I made were used as themes, concerns and questions that we would like to hear

and talk about during the interview. They did not have had no to come in a significant order, and as we knew each -other quite well at the times of the interviews, it seemed odd to keep to a strict structure.

Throughout the Sharing City Project, I had had different conversations with Tina, and Johanne and I had had many conversations, and there were things and stories they had told me that I wished to hear more about with in the interviews. The things I had heard felt like blurry scraps that I wanted to learn more about. I did not feel like there was something to be tested. The interview guides were foremost mostly led by a sense of that Tina and Johanne’s practices and thinking could contribute with alternative perspectives on human-nature relations and sustainability; that they probably could tell us something about response-able and reparative world-making. The themes and questions for the interviews shall be understood as ideas and premature notions, which I discussed with the interview partners. The themes and questions were:

Follow-up interview with Tina / October 2016	Follow-up interview with Johanne / March 2017	Follow-up interview with Tina / November 2016
<p>How has your understanding of the sharing economy evolved through the Sharing City Project?</p> <p>What areas of actions and challenges could the sharing economy address in your municipality?</p> <p>What role could you imagine that your municipality could take?</p> <p>How could the sharing economy contribute to the unfolding of other strategies, politics and plans?</p> <p>What do you regard as the biggest challenges of working with the sharing economy? Why?</p> <p>Has your experiences from the Sharing City Project inspired your further work?</p>	<p>Her motives and concerns for choosing to start Hegnsholt and change career</p> <p>Food waste and the exchange model</p> <p>Reactions and response to the closure</p> <p>Compassion / Why should chickens grow up with a mother?</p> <p>Feed / nutrition and quality?</p> <p>Animal health / their resistance and robustness?</p> <p>The ‘big transition’ in relation to agriculture and food culture</p> <p>Future dreams / what can we do? What does a sustainable food system feel/look/taste like?</p>	<p>Responses to ‘locked-in’ stories, as the ‘organic or not’-debate / resistance, change, apocalypse</p> <p>Different roles and responsibilities in transitions processes / who can do what?</p> <p>Relations between the rural and urban?</p> <p>Background knowledge of food chains and systems?</p> <p>Imagining a sustainable society? Utopia?</p> <p>What does a sustainable food system look, feel, taste like?</p>

The interviewer's role in the situation is in relation to what questions are asked, how they are asked (to ensure an open and 'equal' dialogue), and how the body, voice and language is used to not harm or offend, obstruct, neither the validity of the respondents answers and reflections nor the research material are all most important concerns that should be considered before, during and after the meetings (Alvesson and Sköldb-berg 2000; Flick 2008; Kvale and Brinkmann 2009). As with the descriptions of the ethnographic and interactive methods, I can clearly sense how we have become closer from the initial interview with Tina to the second one, as I was not as nervous anymore. Throughout our conversations, I tried to bring up words and stories that they had told me and asked them to unfold them further or even explain what they meant.

This ambition of confronting them with my own unknowing came with uncertainty and a small amount of fear that they would think 'Well, she's the researcher - shouldn't she know'. But this was not my experience at all. I was very clear about where I came from, what I found interesting and was concerned about, and that their way of doing and thinking was new to me. They also showed interest in my work and it is my experience that this kind of 'honesty' has made it possible for us to build a space for collaboration and co-thinking. As we became closer and more engaged, I most likely developed blind spots and perhaps also another kind of sensitivity to the relations. I have tried my best to add a critical distance to explore the different knowledges and worlds and to question my own assumptions. This is the case in all the conversations, not only in the interview sessions.

After the interviews, which I would rather call 'meetings', I wrote down some immediate impressions, experiences and ideas in my notebook. I have had a document with main ideas, events or things that have changed my view by my computer, but I had not been sure what to use it for. When I came home, I transcribed the interviews by listening and typing both my questions and their answers as they were said, taking out any 'erm's' and 'ah's'. There are places where I have added physical expressions that I remembered,

for instance, Tina used her hands to describe a thing, so I have added that into the text. The interviews and transcripts are both in Danish. I have read through the interviews several times, returning to their explanations and stories, but they have not been coded. When I have opened the files on the computer, a bit of 'coding' has happened, i.e. so I could search for certain emotional expressions.



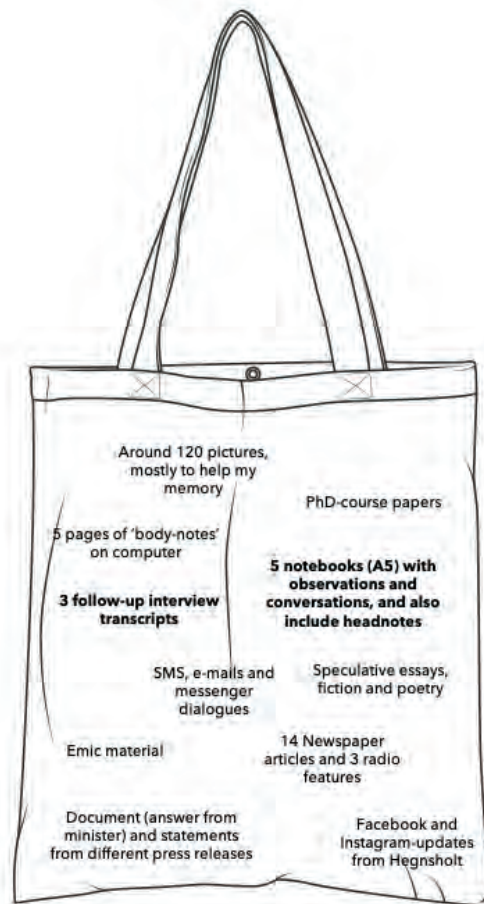
This is an example of notes taken after an interview, to gather impressions, ideas and significant themes, words, issues and questions. I added drawings because I did not have the words yet.

Empirical material and how I involve it in the analysis

Doing interactive and ethnographic research is about engaging in life while also observing, and the empirical materials are thus characterised by first-hand experiences and reflections (Hastrup et al. 2011; Sjørsvlev 2015). As the following illustration seeks to show, the empirical material is composed by fieldnotes, qualitative interviews, documents, and notes from conversations, e-mails, and social media. The fieldnotes refer to specific events and meetings but are also filled with in-between or post reflections and acknowledgements that mingle in conversations with supervisors, friends and neighbours, other researchers and practitioners, just to name a few. There are also references to dreams/nightmares, newspaper articles, documentaries and TV series, blog posts and Instagram pictures that I felt changed the way I understood the research field and asked questions. Finally, the fieldnotes also include reflections and notes about my own experience; from learning how to compost, learning how to gather and forage, getting and losing a garden. In all, the empirical material consists of a number of stories about the actors and their work, documents, statements, and reports about food and waste management, stories about getting involved with waste, food and urban natural environment with sensual and emotional impressions from reading, seeing, tasting, touching, listening, talking, and moving around the landscapes.

My bag filled with empirical material consists of physical notebooks with immediate reflections, minutes, drawings, to-do-lists, and post-it notes or similar with quotes to remember, or other notes; of a document on my computer with reflections called the 'acknowledgement list' with notes and descriptions of experiences, books and visuals that changed my perspective; my Evernote collection of mainly non-academic articles that I have marked and commented, notes on reflections and ideation, academic and non-academic quote collections; and Instagram as my own diary, but also as inspiration from others. **Fieldnotes** are extracts from the experienced engagements and small verbal gestures trying to build a language; they lack intellectual over-

view but are rich in language-searching in their very practical and existential sense. The fieldnotes have, to me, worked as careful reminders, they can take me back to places, people and experiences, and they are full of “proto-language” as Ahl (Ahl n.d. forthcoming 2019) suggests. They are “unfinished, relative, with many voices competing and intermingling; they are shaping the texture of the idea being formed – but never fixating the same ideas. And in that way, they might even be wiser than we are.”(Ahl n.d. forthcoming 2019). On the following page, I have placed two pictures of different notes from my notebooks – as an addition to the other notes shown previously.

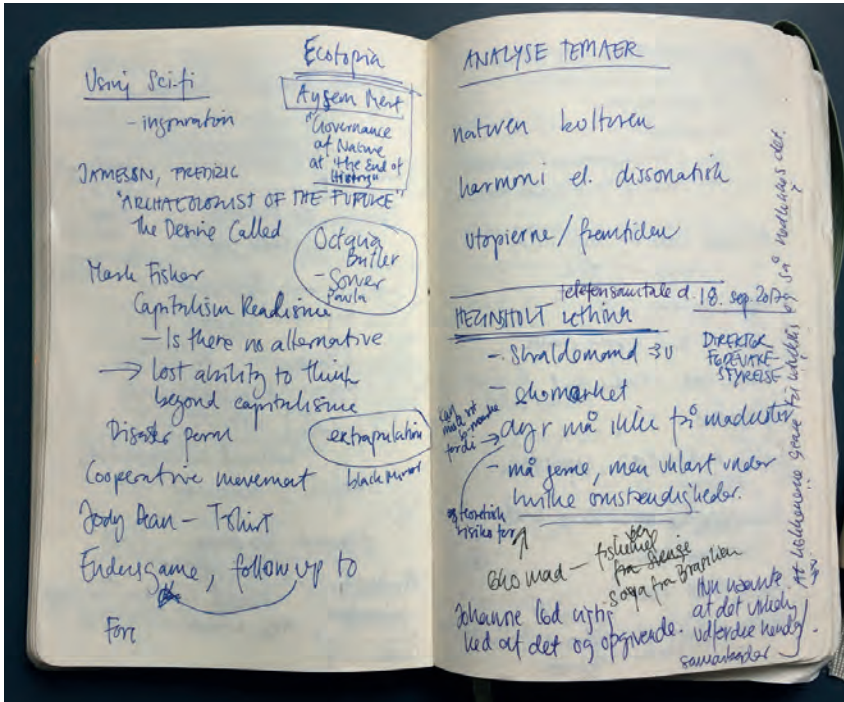


Carrier bag of empirical material

As I will never become fully aware of all the blind spots and blurred edges of these writings and as there is much more to the writing than I am aware of, this leaves an open space for the reader to imagine and interpret. Although I will not write them as they are, as this would be too inaccessible for the reader, I will seek to situate, locate and describe the experiences that the fieldnotes reflect, as I seek to invite a more inclusive and dialogical analysis. Abbott (2007) does not write directly about fieldnotes or interview quotes, but I see some correlations between using his perspectives on the 'lyrical sociology' and fieldnotes and interview material in the written text. Abbott (2007:75) writes that:

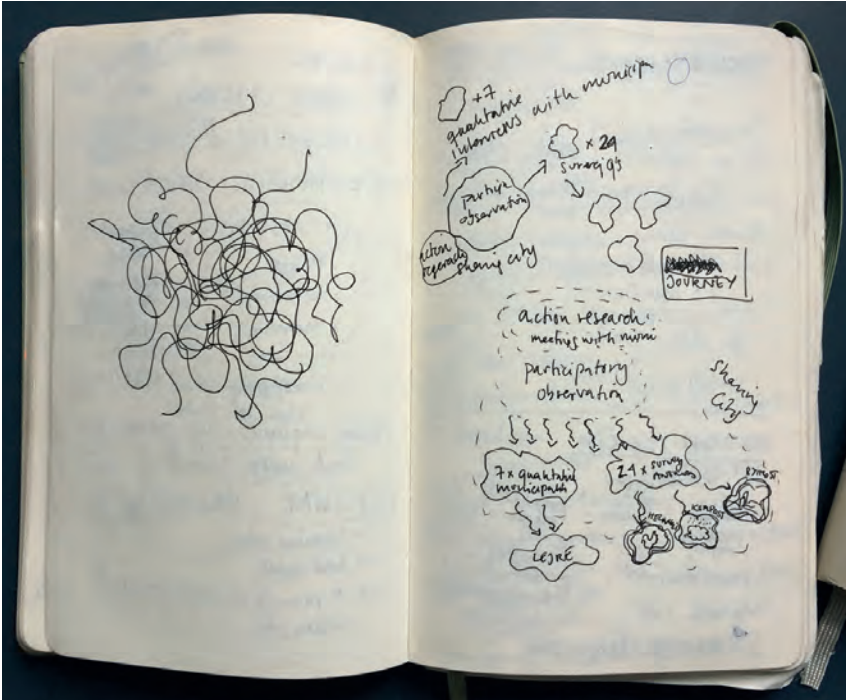
after engagement and personal location, the third element of the lyrical stance is location in time. The lyrical is momentary. This above all is what makes it non-narrative. It is not about something happening. It is not about an outcome. It is about something that is, a state of being." [...] ...a world in a moment, a snapshot of another world in being, even as that world changed.

With this in mind, in the analytical chapters, I am communicating **quotes and fieldnotes** as moments that took place to communicate a kind of humane sympathy and the mutability and particularity of all beings and occasions. Quotes and fieldnotes are snapshots or extracts of larger conversations and lines of thinking, and in the text, I am situating them in relation to the contexts they were found in and in relation to the research questions, the theoretical concepts and other empirical material. The value and status of quotes and fieldnotes, and a performative writing style shall furthermore be understood in continuation of the ontological, epistemological and methodological reflections presented in this chapter, and in relation to the analytical strategy that is performed in a way that is eclectic. The fieldnotes and quotes are given as much privilege and relevance as a theoretical reference. All citations from the actors have been approved by themselves and they have read them in the full texts. Due to the values of the interactive methods, I wanted to be sure that the actors could recognise themselves in the way I had presented their work, stories and thoughts.



This is an example of trying to draw analytical points, together with some theoretical concerns and in relations to empirical notes in a conversation with Johanne.

In the text, I am also presenting **pictures** from Hegnsholt's Instagram profile. Instagram is a social media platform, mainly used as an application on a smartphone with a camera. The main focus is pictures of 'instant moments' and short written captions and hashtags. Instagram is owned by Facebook and has been commercialised intensely. A field of food and media studies is growing, also in relation to social media cultures (Leer and Povlsen 2016b; Rousseau 2012). Leer and Povlsen (2016b:17) argue that "media practices play a central differentiated and differentiating role in people's everyday practices in relation to food, both in and outside the home." Food presentations on social media platforms are used for various purposes, they are an integrated part of the everyday routines, and they contribute to and are nurtured by different cultures of taste and aesthetics (Leer and Povlsen 2016a; Pink



An example of methodological drawings where I am trying to understand what I am doing and the relations between the methods, matters, questions, and beings

2012). Hegnsholt has a website, a Facebook page and an Instagram profile, and they are all part of communicating and marketing the chickens and eggs. With her posts, Johanne seeks to tell a certain story about these foods within a platform and by using hashtags (such as #biodiversity #beyondorganic or #localfood) that connect with other consumers, producers and citizens that have similar interests and values. Hegnsholt's pictures are connected with stories and aesthetics of what could be called the 'new Nordic' local food and nature movement (Harper 2015; Just and Strand 2012). While I would argue that the movement seeks to transform food cultures into becoming more sustainable and local, we should also bear in mind that it (currently) is a story that significantly connects with culturally creative and privileged people. I am including some of Hegnsholt's own pictures (her views), two re-

stauranteurs presenting the chickens and eggs, and two pictures from two other actors who are part of the network. I am doing this not only to visualise the aesthetics and how the services and products are 'marketised', but to show how these social media pictures of animals, farmers, foods, and food and farming practices, and their taglines and hashtags connect with a kind of 'slow activism' and sustainable transition. Johanne and Christian Puglisi also use their social media platforms to generate attention to their political actions and tensions with current legislation. Along with this, I depict that they are 'storying' their food and food practices to try to connect eating practices with biospheres and agriculture, to show the pleasure of 'sustainable' local food and a simpler and slower life (Mikulak 2013). I have chosen the pictures on this basis. Sarah Pink's (2012) work about activist practices also points towards the importance of the mediated practices. With her specific focus on the Cittaslow-movement, she depicts how these mediated processes and digital contexts are places for (global-)local activism, and should be conceived as "inevitable elements of everyday life, and are as such inextricable from the practices and places where sustainability might be both lived and experienced and campaigned for" (2012:139). In chapter 6 'Tasting Landscapes', I am going further into these 'storied foods' and the tensions between consumerism and activism, and in chapter 4 'Humanimal relation', I am presenting some of Johanne's pictures of mother hens and chicks living at Hegnsholt.

In the analysis I use **quotes from the interviews**. These quotes have been translated into English as they were originally in Danish, and if there were a lot of interposed sentences, the quote has been rewritten into a summary. All these rewritings have been sent to Tina and Johanne for their approval and they have read through them in the written context to ensure that I had understood them correctly and so that they could see themselves within the written presentations. Within the analysis I furthermore use some official documents, and I have used quotes from newspaper articles with the authoritative statements and explanations to understand the authoritative arguments and specifications further. These were reactions and responses

to Johanne and Christian F. Puglisi's public debates and articles, and therefore I also present their public statements. This research study could have been further substantiated with first-hand interviews and knowledge from the Danish Food and Veterinary Administration but that has not been possible within the scope and timeline. It would be really interesting to further explore the response-abilities of public servants and how they negotiate politics and administration, visions and plans, the local-global, and the universal-particular; the entanglements and flows of documents, regulations, power, politics and interests, and these practices and response-abilities are manifold. As I will come back to, especially in the chapter 'Fermenting sterile desires', there *doesn't* seem to be one uniform 'authority', but people whose practices span between a regulatory fixity and a transformative disruption.

Performing the written analysis

Within qualitative research the analytical process is understood to begin already when we get the first ideas, pose the first questions, point toward fields, pick (and unpick) the books and articles, and agree to end (for the writing) while typing and reviewing the last words and sentences (Alvesson and Sköldbberg 2000; Denzin 2001; Freudendal-Pedersen 2009; Hartmann-Petersen 2009; Kärreman and Alvesson 2011; Van Maanen 1988). As a consequence, it can be a rather confusing affair to condense the process and its choices into one straight story or argument. To meet that potential critique, it is most crucial that the researcher clarifies the methodological, ontological and epistemological considerations that have given shape to the study, and this has been the aim of this chapter. The introduction has pointed towards the scientific, empirical and normative places that I am writing from and within, the theoretical concepts and languages I am working along, and this chapter has framed the philosophy of science and methodological reflections of the study in general.

This study has roots and routes within a knowledge production affe-

cted by an epistemological point of view that emphasises knowledge as changeable, as opposed to complete and absolute. I introduced this chapter by writing about the interdisciplinarity and eclectic style of this study, and the latter has indeed come into play, as I reached the point where I started writing the analytical chapters. I first read through all the notebooks and read the different writings from different supervisor meetings, courses, surveys, interviews and texts I did for the Sharing City Project. Time had passed between these notes were taken and this rereading appeared and I felt both distanced and dragged back closely into the events and situations again. This helped me trace the movement of thoughts and re-enact with the experiences and observations during those specific times, events, and meetings. Furthermore, I listened to the two qualitative interviews and read through the transcripts. Throughout the transcripts, I marked the questions I had asked but never felt were right to 'code' with theoretical concepts. Rather, I looked for their stories of response-abilities and reparative futures and highlighted what I did not understand, and then I took the worries and questions back to them so we could talk about them. Observation is not just to see what happens, but also about reflecting on what one sees, why you see, as you see, and it is about capturing noise, smell, sensations and intuition (Hastrup et al. 2011:32, 65). According to Van Maanen (1988), a written text is about the experiences of the fieldwork, where words and sentences have been deliberately chosen (1988:4). Pampering routines and dramatic episodes, impulses and rational choices, mistakes and accurate assessments, randomness and planning are all part of what forms the work, and to Van Maanen, ethnography is a result of fieldwork. From this point of view, ethnography is a written product, a presentation that has some independence from the fieldwork itself (Van Maanen 1988:3, 7). Writing ethnographies are desktop work that originates of the field (Van Maanen 1988).

Written materials as a thesis like this, become time-space-practice fixities as they capture multitemporal moments of studying that happened within and through multiple spaces. They become extracts of complexities, experiences, and emotions knitted together into linear stories that

seek to make the text and stories accessible for the readers. With inspiration from Le Guin (1986, 2017), among others, the fixity and linearity of the 'final' written materials have disturbed me. This thesis' final outcome will reflect some kind linearly (and will probably be read linearly – from introduction, through analysis, to conclusion), but my hope is that the ideas and stories will not be fixed but bring attention to the suggested circularities. Also, as I highlighted in chapter 1 'introduction', I am trying to work with a kind of storytelling that is non-narrative (Abbott 2007), and the reader that searches for a coherent structural account will probably be disappointed. While writings appear linear and the reading of a thesis like this might as well be linear (at least it is different from reading for instance collections of poems, journals, poems or encyclopaedias), the writing process itself is messy, jumping between sections and chapters, doing rewrite after rewrite over a long period. I highlight this because our research experiences are often spontaneous and often not so straightforward as they appear in written forms.

Within this interpretive ethnographic tradition the ethnographer ought to put the experienced into words, and therefore I consider this as a story that shall reflect the studied and communicated, the observed and experienced (Van Maanen 1988:3–7). The following analytical chapters are collections – or bags as Le Guin writes (Le Guin 2017) – of the observations, conversations, experiences, theories, concepts, and stories collected throughout the study. Vannini (2015c, 2015a) questions the scientific idea of representation in relation to validity, reflexivity, objectivity, and epistemology. "Writing up" the fieldwork can be viewed as a matter of style and matter of storytelling (Bundgaard, Mogensen, and Rubow 2018; Hansen and Simonsen 2004; Van Maanen 1988; Sjørsløv 2015; Vannini 2015c, 2015a). Van Maanen (1988) suggests the realist, the impressionist and the confessional writing style, and Vannini (2015a) suggests a more-than-representational style that seeks to enliven representation: "by enlivening ethnographic representation I refer to an attempt at composing fieldwork as an artistic endeavour that is not overly preoccupied with mimesis: an endeavour that is open to the potential of creation, animation, and regene-

ration.” (Vannini 2015a:119). Abbott (2007) suggests a ‘lyrical sociology’ that has similarities with Vannini and Van Maanen, but where Vannini suggests ‘mimesis’, Abbott suggests ‘concrete emotions’.

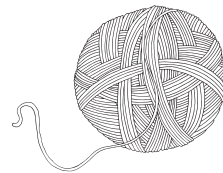
Vannini emphasises that this is not to say that speculative imagination can replace honest fieldwork, and explains the linguistic concept, *the realis mood*, which is a “communicative mood that is used to indicate that something is the case” [...] and “lies in the core of scientific communication as it allows it to be persuasive and authoritative, as well as logical and definitive.” (Vannini 2015a:119). The *realis mood* is most important and should be combined with what he calls the *irrealis mood* “a rhetorical formula used to openly create a sense of unreal and surreal, a sense of possibility, of condition, of wish, of fear, of hope” (Vannini 2015a:119). This is in search of a writing style that is more sensuous, more relational and that combines the lived experience with the ‘projected’ one. A writing that can include wisdom, judgment and sensitivity, hopes and dreams, and be like an intransitive verb that can carry on through (Ingold 2014:244), and a writing that can involve the language of models, predictions, scenarios, plans and projects with final outcomes (Ingold 2014). Altogether they have inspired the way I am writing, performing, the analysis. I must emphasise that it is not about replacing the honest fieldwork with speculative imagination (Vannini 2015a), but to find the best way to write the observed, experienced story that could explore and give answers to the research questions.

With the dancing terminology introduced earlier with Le Guin’s (2017), this analytical writing process could be called ‘**eclectively guided improvisation**’. This is an analytical process that furthermore has been inspired by Donna Haraway’s ‘playing string figures’ (Haraway 1987) and her story of ‘sowing worlds’; “Sowing worlds is about opening up the story of companion species to more of its relentless diversity and urgent trouble. [...] It matters what stories we tell to tell other stories with; it matters what concepts we think to think other concepts with.” (Haraway 2016:118). With the research questions as guides, I grabbed concepts, words, ideas, feelings, and stories, the-

oretical and empirical, that came into my mind; put them together, separated them, put together again, unfolded and refolded them, rewrote them, deleted them, changed them, added to other chapters, made new chapters. Wrote, wrote and wrote what came along. At a point, I began to find a rhythm and continuation *with* the empirical and theoretical, and this where the analytical chapters began to take shape as they appear here. They have since been rewritten and refined; they are not just shaken out of my sleeve, or should I say feet.

The story on the whole and the stories within the four analytical chapters have been choreographed. I have tried to build the four so-called analytical chapters as a whole, where one chapter's conclusions lead into the next one and they are all related by concepts: reparative practices, response-abilities and transformative gestures. Furthermore, there are some basic aspects that run throughout the chapters. These are stories, affection and care, place and practice, and multispecies entanglements, and it is the waste, food and animals, and tensions between Hegnsholt's practices and industrial practices.

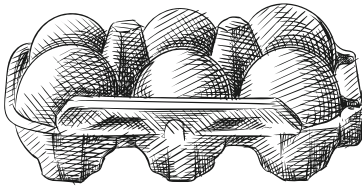
The carrier bag's content of empirical material has been emptied out on the table and sorted several times. The four analytical chapters have been framed by central topics found in the empirical: sharing city, human-animal, theoretical risk of contamination, and eating and tasting. They all point to the main research question, and as I presented in the introduction, I have asked questions to the materials and topics shaping each analytical chapter.







3. Stories of the Sharing City



In this chapter, I will explore the different practices of the sharing economy within the Sharing City Project and investigate what thoughts and dialogues these practices gave rise to. The sharing economy within the Sharing City Project is connected to municipal governance, planning and development, and, therefore, questions things like (public) spaces, goods and resources, and commons, commoning and commune (Hansen et al. 2016; Shaw 2014). This chapter will relate these concepts in a more implicit manner and describe how the sharing economy became an opener to another understanding of spaces and places, practices and peoples, commons and co-existence, humans and non-humans. I will discuss *sharing* in relation to the stories of the Sharing City Project, how this invites us to think about practices, places and people. The sharing economy that emerged through the Sharing City Project led to an array of projects and a multitude of attitudes, ranging from the hyper-neoliberal to hyper-communal, and the dialogues about the sharing economy reflect political and normative desires and visions of how societies could develop. Therefore, there was not one unified understanding of the sharing economy but multiple

stories and relations, and those are what this chapter will follow. This chapter will centre around the relational and temporal understanding of the local, regional and global, the urban, rural and in-between, the practices, humans and non-humans, and will elaborate on how the observations and experiences of the sharing economy showed how deeply connected and interdependent everything is (Sheller 2014b; Sheller and Urry 2006). From this perspective, the story of this chapter will focus on the journey with Johanne Schimming from Hegnsholt Farm and Tina Unger from the Municipality of Lejre, with a particular focus on sharing food waste, human-animal relations and the responses to environmental change. Moreover, this chapter will introduce the empirical emergence of response-abilities and reparative futures.

This chapter will draw on material from interviews with the participating municipalities, fieldnotes from the participatory observations throughout the Sharing City Project, interactive research from Hegnsholt Farm and interviews with Tina Unger (Program Manager for Food, Business and Sustainability) who was the Sharing City Project's Project Manager at Lejre Municipality. First, I will introduce the sharing economy in broader, popular terms and unfold how this phenomenon was negotiated, explored and situated within the Sharing City project. Then, I will elaborate on how the sharing economy connects with the empirical material in relation to cities, communities and resources, and to places, practices, people and materials. Finally, I will focus on the stories and storytelling that happened throughout the Sharing City Project, but with an emphasis on the tensions, activist and transformative aspects, which will lead to a longer journey with the food waste, chickens, eggs, urban-rural landscapes, people and practices.

Situating the sharing economy

During the summer of 2014, I was shaping my research proposal, and it was around this time that the word 'sharing economy' (in Danish "deleøkonomi") first entered the Danish vocabulary in the media. In January 2015, the Danish Government addressed a motion to support

and highlight the sharing economy (Folketinget 2015) proposed by the Red-Green Alliance party. The debate reflected a unique enthusiasm from all parties for the potentials of a sharing economy. Only a few months later, scepticism had crept in and issues, such as underground economy, social taxation, workers' rights, insurances, competition acts, environmental taxation, and housing prices were pointed out. The launch of the government strategy kept being extended, and it was clear that the administrative problem was that these new businesses and their related challenges work their way through administrative offices, legislation, and regulations in new ways. The strategy that came out in October 2017¹ is clearly concerned with the digital platforms of the sharing economy and those who can contribute to economic growth, entrepreneurial innovation, and smart environmentalism and wish to enhance trust, taxations and lower the barriers for new businesses. With experience from the Sharing City Project, we found that it was extremely difficult to make a strategy for the sharing economy, which was the initial idea for each municipality. This is because *what* is shared and *how* it is shared matters, and this also became clear in the government strategy that came out a year after the Sharing City Project had finished.

When I started my research project, no one really knew what was going on and what should be done and I spent the first nine months chasing new definitions and clarifications that primarily came from (new) consultants and entrepreneurs in the field. At the *Oui Share Festival* in Paris 2015, which gathered all different kinds of aspects of the sharing economy, I realised that it was not just a Danish experience that the sharing economy lacked a shared definition. The vagueness of the wording was reflected in English, Spanish and French, and there were many different interpretations of the sharing economy activities and the aim and purpose of them – roughly speaking they fell into corporativism, environmentalism, and entrepreneurship. The definition of the sharing economy still seems vague and mani-

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1) The Danish government strategy for sharing economy 2017 and 2018's initiatives:
<https://www.regeringen.dk/nyheder/ny-strategi-skal-fremme-deleoeconomien-i-danmark/>

fold, but while the Sharing City projected the phenomenon, it was the centre of fierce and intense political debates. Today (2018), it does not have the same alarmism around it, and the debates are much more nuanced, particularly on mobility, housing, tourism, and retail.

After chasing a definition for nine months, I stopped as it did not make sense due to the varied character of the activities, the local interpretations, and its relatively early stages of development. Due to these circumstances, I found it much more fruitful to follow and study how the sharing economy was conceptualised, discussed and storied among the actors of the Sharing City Project. Furthermore, I did not find the naming or the defining to be most important at the current state, but rather what the actors were 'doing with it' and what they wanted the sharing economy to do, politically, culturally and strategically. This decision was, among others, propelled by Lejre Municipality's position with regards to the sharing economy, where it did not care much about the name game but was more interested in what kind of practices, collaborations, and communities that could come out of it.

All in all, the municipalities saw the sharing economy as a tool and not as a goal, strategy or solution in it itself, but rather as something that could *assist* the contemplation of the existing plan, politics and visions (Fjalland 2017): Sønderborg Municipality was thinking of the sharing economy as a continuation of their revitalisation of the many villages within the municipal region, as well as the issues of mobility and immobility; Middelfart Municipality worked in terms of human resources and creating co-working, entrepreneurial spaces and addressing mobility issues; Nyborg Municipality thought of it in relation to tourism, regenerating villages and enhancing social cohesiveness; Slagelse Municipality wanted to rethink the use and value of the municipalities own facilities, citizen involvement, and resources such as buildings and transport means of different mobile social services; and Frederiksund Municipality took a similar approach and was furthermore interested in how the sharing economy could support civil engagements and communities. The Culture and Leisure Department of Copenha-

gen Municipality was foremost interested in how they could support a culture of sharing, significantly non-monetary sharing, and in relation to a regeneration of the culture of associations (sports, culture, and art).

After the project had finished, I talked to Tina Unger from Lejre Municipality, and she explained this further in relation to one of the municipality's previous projects, where they wanted to explore how an organic mindset could create development in a rural society. The project was called 'Lejre - the Organic Municipality'. I highlight this because it is related to the response-abilities I decided to follow later on.

Instead of starting by defining what an 'ecological municipality' would mean or explain what it could be, we just mentioned the things that were happening. Very quickly, we started this magazine called 'The Ecological Municipality', which became a means to tell the stories. [...] From being something very elitist and abstract, The Ecological Municipality [not the magazine] became very down-to-earth. Another effect was that when we mentioned a project, others would get inspired to do something similar, sometimes together, and then one project became more projects. A third effect was that it created a network, because one person read about another person doing something, which resulted in a "I need to talk to that person". And then, one could say that this is about credibility; one could discuss back and forth whether 'the Ecological Municipality' was a good or bad idea, but when things are working well and people like it there isn't much to debate. It [all the actual work, projects and people] created a lot of credibility around the venture, around itself. (interview, November 2017)

This approach was also similar to what Tina described at our very first meeting in February 2015, how they approached the sharing economy-agenda, which inspired my decision of *not* focusing on different discourses of the sharing economy but on the practices that were attracted to this theme, and *not* putting the sharing economy in the centre of the research study but rather its practices.

But let me begin the empirical story a bit earlier. Throughout 2014-16 the sharing economy escalated quite fast in terms of the growth of

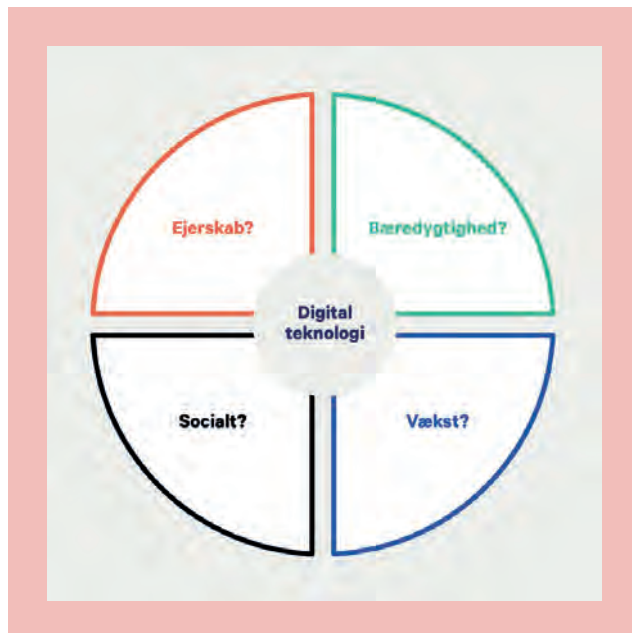
companies such as Airbnb and Uber, and all the businesses, organisations and projects that wanted to join the adventure or movement (depending on one's view). This rapid growth and great attraction stressed authorities, businesses, unions, and organisations and somehow seemed to demand quick decisions and diagnostics of concepts, potentials, and challenges. We, the research team of the Sharing City Project, chased new definitions, growth extrapolation, and listings of new companies and organisations, and constant future-forecasting played a considerable role in the narratives and entanglements.

Halfway into the Sharing City Project, in June 2015, it became clear to us that the quest for evidence-based predictions of the economic potentials and value extrapolation of the sharing economy was unachievable, and that the existing predictions were reflections of normative motivations for how society should develop and consultant's interest in taking part in this economic adventure. The involved partners were bit disappointed and got frustrated due to the missing manageable definition and guidelines of how to act in the sharing economy. The conceptualisation was discussed continuously and the "true" interpretation of 'sharing' was a sore spot. The debates were highly contradictory, especially when someone wanted the word sharing to only be interpreted in one of its five meanings – as a kind of rental – with the purpose of rejecting it as not real sharing and to underline the 'true nature of market'.

Trying to grasp what the sharing economy was and conceptualising it, we found that the word for "to share" ("at dele") in Danish could be used to describe separating, distributing, giving, participating, exchanging, and sharing. Consequently, we came to the conclusion that it was not possible to talk about one true sharing economy and decided to consider the sharing economy as an umbrella term. Like this, the term could cover various types of transactions, capital, objectives, channels, organisational forms and territories, and the practices, people and projects that thought themselves part of the sharing economy were welcome. The purpose of the Sharing City Project was to explore what the sharing economy could be

and do, and in that early and premature stage of many unknowns in 2016, it seemed too limiting to push out and exclude anyone just because of a narrow understanding of the sharing economy.

Based on the initial interviews, meetings, and dialogues, we suggested (Landbo and Fjalland 2016) to use the sharing economy as an umbrella term conducted for the Sharing City Project. We decided that the sharing economy (for now) included different forms of transactions and exchanges, different forms of capitals, different channels, organisations, and geographies. Also, it was clear from the negotiations and discussions at the time that it was only possible to talk about *the motivations for potentials* in sharing economy, and not yet the actual potentials. To assist the dialogue, we created a (suggestive/prototype) figure with a red, green, blue and black box, and with 'digital technology' written in the middle of a circle (Landbo and Fjalland 2016);



The colours indicated four significant motivations or drivers for moving the sharing economy forward; the red was associated with accessibility and communality; the green with environmental transition and sustainability; the blue with entrepreneurship and economic growth; and the black as a reference to underground economy both as a friendly, neighbourly exchange and a conscious avoidance of taxation. Developing the figure – both *out of* the discussions and using it to move the dialogue along – made it clear that the sharing economy in relation to municipal context was *not only* digital and that the digital should not be prioritised. The digital aspect was interesting, but it had to relate to real life engagements, and that was most important for the municipalities (notes, May 2016). Furthermore, conversations around this figure made it clear that the sharing economy was *not* a new phenomenon, and this made some municipalities think about it a little ignorantly while it seemed to remind others of co-ops, communality, communities, and so on.

The multinational, billion-dollar sharing economy businesses had started heated public political debates, and we had chosen four observed positions and directions for our figure. These *directions/boxes* were not full, dense stories but directed the conversations around the phenomenon and helped move the dialogue along at times when it got stuck. The actors, which at the time included the municipalities (the innovators were just getting ‘on board’), included the colour model in their language, re-modelling and recolouring it, and basically used it as a tool for exploration and as a way to attract the ‘innovators’, and to connect the sharing economy to their local municipal political context. They started taking ownership over this “global alien of a sharing economy” by anchoring it and locating it. Later on, when the project was finishing, the representative from Frederikssund Municipality referred to the ‘box of colours’ and expressed that the council had used it in their internal administrative and council debates and this had made the sharing economy a common project at the town council (interview, October 2016).

This interpretation of the sharing economy was challenged at the mid-way-conference in September 2016, where the focus was to discuss any experienced (and yet still very premature) political issues and introduce some of the innovators. The conference closed with a panel debate with national politicians and, as this debate ended up focusing mainly on the party political positioning in relation to Airbnb and Uber, it became rather extraneous and disconnected from the work and exploration of the sharing economy organisations and participating municipalities. In the conference evaluation, the actors of the Sharing City expressed this frustration and also pointed out that this was not relevant to their municipal context, and that they were bored of this narrative about the sharing economy, which they felt narrowed the perspective and imagination of what the sharing economy could do.

Most of the municipalities were in rural and suburban regions and were much less affected by Uber and Airbnb than the bigger cities. Therefore, they were, so to say, liberated from management pressure (dealing with the problems) and could, therefore, think and experiment with the sharing economy more freely. This did not include the Culture and Leisure Department of Copenhagen Municipality because there was much more political and media attention placed on how they would deal with Uber and Airbnb. Whereas the overall focus of the project was to gather knowledge, define and describe the sharing economy, the municipalities were not as caught up in in the semiotics or semantics, whether a project or organisation could be defined as part of the sharing economy or not was not the main interest.

The municipalities were mostly focused on and motivated by their local issues, mainly concerned with sustainability and welfare, and how these could be addressed and solved. This is very understandable as public means are used in participation with such explorative projects. The municipalities' exploration of the sharing economy brought about reflections on the welfare state, the Danish cooperative movement with its roots in the 19th-century farmers society, about commons and the commune (municipality), public-private-ci-

vic partnerships and collaboration, community-driven projects, co-creation, and collaborative governance. In common among the participating municipalities was an emerging rethinking of increased access to public resources – e.g., opening the school kitchens after school hours, or creating access to municipal cars after certain hours, and being more of a facilitator than an owner of the sharing economy services, with or without digital technologies. One representative from the municipality of Sønderborg said they found the sharing economy to be a part of the community’s DNA in relation to their whole strategy and project that had regenerated the many small villages around the municipality (Fjalland and Landbo 2017a:62).

The innovators get involved

The approach to defining and exploring the sharing economy stopped being led by curiosity when the ‘innovators’ came on board from August to October 2016. The innovators was the internal project team’s term for the people, projects, businesses, co-operatives and associations working with the sharing economy in the Sharing City Project. The municipalities approach was that if something seemed like a good idea or an alternative solution, they would listen to it, explore it and try it out, but it should (potentially) have real value for the citizens. They were not disinterested in the conceptualisation of the sharing economy as they also wanted to “get more concrete on a rather diffuse matter” (interview, Copenhagen Municipality, October 2016). As I have described, the different municipalities had different interests in the sharing economy and based on a survey² done in October 2015, their local issues, challenges, plans and concerns were collected which the project team at the DAC then formulated into six focus areas: share tools, share waste, share facilities & spaces, share data, share transport, and share activities. The innovators that got involved in the project reflected this more open and societal understanding of the sharing economy. Many of them were so small that they

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2) This was done while I was on maternity leave and I was therefore not taking part in it.

could operate quietly in the shadow of Airbnb and, and furthermore most of the innovators were not explicitly dealing with the 'sharing economy' but had used the sharing economy as a ticket to the project - to get introduced to municipalities and participate in the business development workshops by the external consultants and 'incubators' from Rainmaking Innovation (fieldnotes, August 2016). This was not to exploit the situation nor to dilute the narrative, as everyone who participated was curious about the movement around the concept and operating with variations of sharing. When I asked Johanne Schimming from the Hegnsholt Farm why she had joined she replied:

I joined because the municipality [Lejre] asked if I wanted to and I thought that maybe I could get some networking and experience out of it. I did not have a specific plan with it, but I hoped that the exchange agreement and relation I had with the restaurants could be refined and professionalised slightly and that perhaps it could be geared up. (interview, March 2017)

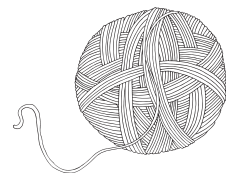
The municipalities, themes, and approaches to the sharing economy and the innovators are all together directing the stories, attention and entanglements of this research study. How the sharing economy could assist or initiate alternative public-private-civil collaborations and partnerships, and attention towards co-creation, collaborative governance and collaborative innovation (Sørensen and Torfing 2011, 2018; Torfing et al. 2012) was of significant interest and essential throughout the Sharing City Project. Both in the initial and basic project design and amongst the participants, and as it became an attention for the research project. As a young academic coming from a critical Marxist tradition, I met this private, corporate interest with some scepticism. Although the work and approach of Lejre Municipality initially made me think differently about this relation, especially on how to engage with environmental change. I asked Tina Unger from Lejre Municipality if she could explain her perspectives on the relations, roles and responsibilities more closely (interview, November 2017) and she told me that:

There is some stability and professionalism in it [private actors], and actually some positive economy when private actors get involved. It is clear that everything that goes on in the civil society is fun and meaningful, creates a lot for the community and does a lot of good, but it also works on those conditions [of voluntarism]. The initiative may not exist after six months. Although, it is my experience that when one passionate community member slows down, another takes over. Usually, those practices go up and down, and the private and the civic actors work with very different conditions. And by all means, one could say that such an important agenda [environmental change] cannot only be based on sheer voluntarism and civic actions. One could also say that it would be really unfortunate if we had a society where those who make money and create workplaces only worked with some kind of black agenda [focused on peak-oil, carbon, growth], and that all those who wanted to do something good for the society were civilians and voluntarists. Then, the transition would never happen. We have to find a way, where the time that people spend on work actually works towards a better sustainable future. [...] The private actors are actually extremely important, but they cannot exist without the politicians, and they cannot exist without the organisations and all the civil groups. They are extremely important to experiment and try out things that increase life quality. Then, it is more a way of thinking both-and, and not either-or. (interview, Tina, November 2017).

Despite this elaboration being expressed a year after the Sharing City Project had finished, it shows how the sharing economy “was used as a launching pad to discuss how cities and societies of the future can develop.” (Fjalland and Grave 2017:14). By the end of the Sharing City Project in October 2016, the different municipalities expressed how the sharing economy had given rise to rethink the commune, communities, organisations, responsibilities, resources, and collaborations; it had given rise to revive the narrative of their own – the commune’s – organisation and communal reach. For instance, the political representative from Frederikssund Municipality argued that she actually had thought that the municipal governance could be perceived as the largest and most beautiful system of a sharing economy (interview, Frederikssund Municipality, October 2016). Just as the municipality partners – and therefore the urban governance agenda – affected the ideological and

overall conceptual considerations of the sharing economy in the Sharing City Project, the innovators and their actions have affected how the sharing economy has been conceptualised. As the overall project was founded under the mantra of 'creating better cities', the innovators who wanted to get involved with the Sharing City were *not* the type of businesses that were primarily motivated by a high and fast return.

Although the project was coming to an end and a clear definition or answer was expected, throughout the interviews it was clear that the municipalities had moved on from the frustration of lack of definition to use the concept as a playful game, where they help something familiar, i.e. in relation to the old Danish co-operative movement and the communal experiences and traditions together with something that seemed a bit fresher. According to the participating municipalities, the work with the sharing economy in the Sharing City context had inspired them to revive a kind of drab or mousy connotation of the municipality (fieldnotes, October 2016). For these different reasons, I do not find it enriching to demarcate what the sharing economy is or is not, or who is doing it right or not. They all participated in the project because they thought it was relevant for them to investigate and explore the sharing economy in relation to important local issues, and I am not the one to tell if they were rightfully placed there or not. I take up a different perspective as the empirical observations showed that it was not so much the sharing economy in itself and its definitions that attracted the project partners, but rather the different activities and suggested solutions. Situating the sharing economy within the context, people, projects and practices of the Sharing City- Project was somehow also to make it clear that we were discussing a different kind of sharing economy than that of Airbnb and Uber. With this particular, situated and relational understanding of the sharing economy, the following section will connect it to other fields, stories and scales.



Sharing economy in cities, communities and resources

A few months into my research project, I was asked if I wanted to host and give a presentation at a public morning debate at the Danish Architecture Centre. I agreed, and we chose to name the debate *The city of the sharing economy* (in Danish, *Deleøkonomiens by*), and apart from me, Tina Unger from Lejre and Birgitte Svarre from Gehl Architects were to discuss public spaces and collaborations in relation to our ideas about the sharing economy. A few months later, I gave a presentation in a research group at Lund University, Sweden, and changed the title to *The city's sharing economy*. I highlight this anecdote because it is a good narrative for how 'the sharing economy' moved out of the centre of my research project and perceiving the sharing economy as already essential aspects, movements, and practices that give shape to the city.

Throughout the Sharing City- Project, we found that the sharing economy dealt with the fact that a number of private individuals, businesses, public authorities and organisations have resources that they share with other private individuals, businesses, organisations or public authorities via digital platforms, collaborations or networks (Fjalland and Landbo 2017c). The resources that are shared and re-thought can be human, material, organic, or spatial. And this act or practice of sharing encompasses both exchange, common ownership, joint consumption, renting, leasing, trading, co-creating, and co-financing. This occurs via single payments or subscription payments, where people pay for access to the resource or contribute with own possessions, skills, data, money and/or time. (Fjalland 2017:161). Furthermore, we found that: "whether you consider sharing economy to be a new marketing model, a pathway to green transition or a strengthening of social cohesion, sharing economy is reflected in cities and local communities – for and among people, with and without technology as a tool or mediator." (Fjalland 2017:160). For the participating municipalities, digital technology was, in general, perceived as a means or mediator and not as a goal that should be achieved in itself. In several ways, the sha-

ring economy in the Sharing City Project could be defined as an umbrella term covering different actions and practices. When I talked to Johanne from Hegnsholt Farm about sharing economy she explained:

For me, it is just common sense that we have to think about the Earth's resources and I often think that this is how we used to think in old times and then this industrial society took over and we only think about growth and productivity and it is like there is something we have forgotten. At least from my perspective, and that is how I understand it. (interview, March 2017)

While the sharing economy, in the form of capitalist business models, has created a lot of noise and been labelled as disruptive, I will argue that the partners involved in the Sharing City -Project are working with sharing economy projects that are trying to rethink collaboration, response-abilities, accessibility, and use of human as well as non-human resources (Botsman and Rogers 2010; Rifkin 2000; Schor 2014). This is also what I hear in Johanne's answer when she mentions 'earth resources' (almost as commons) and 'old times' and places these against current industrial practices. To work from this perspective is according to Johanne 'common sense', but as we experienced in the Sharing City Project and Johanne's dispute with regulations, these practices and values are not yet considered 'common sense'. I would say, that despite 'circular economy' gaining societal and political recognition, this practice and story of resources is still commonly considered as rather alternative.

The sharing economy that has appeared in the Sharing City Project includes organisations that explore alternatives to capitalist and industrial economies and logic, and the kind of sharing economy that they practice has sparked reflections about resources and the production, consumption, use, and disposal of the partners of the project, including myself, as well as more general thoughts about resources. In the final report of the Sharing City Project, I wrote that the arrival of the sharing economy invited us "to re-evaluate what resources are, where they're located, how they can be utilised (not exploited), distributed differently, and how to organise and classify them." (Fjalland 2017:160). I am adding resources to the Carrier Bag.

In relation to the matters themselves, the first key features of the sharing economy were about utilising all the ‘idle capacity’ that was already around us. In an article in the magazine *Wired*, April Rinne (2014), a sharing economy spokesperson and individual consultant of sharing economy, wrote that:

Look around you: idle assets are everywhere. From parked cars to empty buildings, vacant shops to derelict land, unused skills to leftover minutes on our mobile plans and, of course, storage warehouses jammed with stuff long forgotten by its owners. Idling capacity -- the untapped value in underutilised commercial, personal and urban assets such as these -- is pervasive. It's in our homes, supply chains and cities.

This idea about ‘idle’ was interpreted (first) with environmental and social benefits, as there was so much ‘stuff’ out there just being stored and underutilised that could become accessible and there was no need to produce new ‘stuff’. Several calculations of how much a drill is actually used or how much time a car is parked and stands still followed, but also critical reviews that, for instance, argued that it was only the already privileged that could take part in that economy and that, for instance, car-sharing would increase pollution and congestion because more cars would be driving on the streets, and other critical reflections about the immediately unintended consequences (Bardhi and Eckhardt 2012; Concito 2015; Freudendal-Pedersen and Kesselring 2018; Martin 2016; Schor 2014; Sundararajan 2016).

With time, the sharing economy and its ideas about ‘idle capacity’ lost its innocence and was nuanced to have, depending on eye and mind, both good and bad social, environmental and economic consequences. Questions of accessibility and distribution, idle capacity, and careful ethical and political considerations that are of both relevance and interest must follow. Although I also reached a point where I was fed up by a narrow debate that sought to categorise the sharing economy as ‘good’ or ‘bad’, and with the experience and acknowledgment about the sharing economy within the Sharing City Project, I wished to

move beyond that debate. Or rather go back to the basics and explore other and different historical and cultural interpretations of sharing, economy, resources and places. We add these to the Carrier Bag.

Thinking resources reparatively and landscapes relationally

I began to read more closely into the relations (and inequalities) between the resources, environment and politics. Shiva (2009, 2016) explains how the word 'resource' has roots in the Latin word 'surgere' that as the season Spring reflects a process of rising again and again. Moreover, it implies an "ancient idea about the relationship between humans and nature: that the earth bestows gifts on humans who, in turn, are well advised to show diligence in order not to suffocate her generosity" (Shiva 2009:228). According to Gibson-Graham et Al. "economy reflects decisions around how to care for and share a commons, what to produce for survival, how to encounter others in the process of surviving well together, how much surplus to produce, how to distribute it, and how to invest it for the future." (2013:xvii). While capitalism is given a privileged place in academic presentations of social life and relations to also suggest anti-capitalist projects of action, within these capitalist spaces, I am searching for practices that are different from that significant story about modernity as dead, alienated and disenfranchised (Bennett 2001). This is not to counterargue critical capitalist views or their importance, but to show that there is something beyond and more to that tale, and to wonder whether the dominant critical tale of capitalism that penetrates the social representations also might curtail anti-capitalist imagination? Gibson-Graham (2006:3) writes:

For in the vicinity of these representations, the very idea of non-capitalist economy takes the shape of an unlikelihood or even impossibility. It becomes difficult to entertain a vision of the prevalence and vitality of non-capitalist economic forms, or of daily or partial replacements of capitalism by non-capitalist economic practices, or of capitalist retreats and reversals. In this sense, "capitalist hegemony" operates only as a constituent of, but also as a brake upon, the anti-capitalist imagination.

These perspectives on resources, together with the experiences from the Sharing City Project, gave rise to think of sharing and economy in reparative terms. A reparative thinking that I add to the Carrier Bag, while also seeing what happens if we release 'resources', 'sharing' and 'economy' from the structural capitalist relations.

While there are practices with the sharing economy that reinforce the neoliberal paradigm's exploitation of resources (Martin 2016), I would also argue that there are practices with the sharing economy from the Sharing City Project that are concerned with how to enhance a more sustainable form of consumption and create a pathway to a decentralised, equitable and sustainable economy (Martin 2016). These practices, I would argue, value and perceive resources in the older meaning, reparatively, and seem to be related to a kind of 'true materialism' that Schor (2010) suggests. The routes to lower the ecological impact of consumption are, according to Schor, about taking "the materiality of the world seriously" (2010:9) by appreciating and preserving resources on which our consumptions depend.

As I understand this position, it is about sustaining a system that is over-consuming but to criticise the over-consumption of constantly purchasing new stuff, using and discarding it. Schor's idea is that by becoming aware of the social, environmental and economic problems of current consumption, consumers might make more response-able consumption choices and make producers more attentive and response-able. Taking 'materiality' seriously is, in my understanding, about connecting landscapes, people, animals, practices and systems, and an idea that this connection could enable a more response-able and reparative consumption. I am aware that for a long time, consumers and citizens have been considered to not make rational choices, but that choice is affected by social, economic and cultural structures, and of emotional desires (Carolan 2011; among other Freudendal-Pedersen 2014; Mol 2009).

This made me wonder how to create a system where resources really could sprout again and again. Where materials are produced, moved, used and discarded in reparative terms. It made me wonder when, how and why a kind of disconnected over-consumption appeared, and what alternative productions and systems that had another understanding of the relation between humans, non-humans, economy, trade and settlements would, could or had historically looked like. I made me wonder about the connections between sharing, survival and settlements. Looking back became part of looking forward.

The fiction writer Margaret Atwood defines her work as speculative fiction because she unfolds current trends or events that may have already happened into a near-future (Atwood 2004), but she also argues that in the “end”, speculative fiction, science fiction, fantasy, cli-fi, and so on, all come under the “wonder-tale” umbrella [...] of exploring another kind “other world” – our own planet in the future” (Atwood 2011). And because of this, I found it most useful to add non-science or fiction or work of speculative imagination into the Carrier Bag of this research. Not necessarily in the writing, but as a way of thinking, to help unleash the current attention with industrial and capitalist practices in other ways. Through her speculative fiction, Atwood has created what she names ‘Ustopia’. “Ustopia is a world I made up by combining utopia and dystopia – the imagined perfect society and its opposite – because, in my view, each contains a latent version of the other. In addition to being, almost always, a mapped location, Ustopia is also a state of mind, as is every place in literature of whatever kind.” (Atwood 2011). My suggestion might be that thinking ‘speculatively’ and ‘ustopian’ about pasts, presents and futures could become a practical performance of being that could be helpful to understand reparative futures.

Looking at the “old times” that Johanne from Hegnsholt Farm mentioned, is not about being romantic, but to stretch out the perspective that sharing resources has made it possible for humans to survive and develop, throughout ancient history; hunters and gatherers shared the spoils and yield; sharing tools, machinery and knowled-

ge was crucial for craftsmanship and farming (Fisher 1979; Sahlins 1974; Scott 2017; Shiva 2016). Furthermore, the spatial connection to the sharing economy is underlined by the fact that we share Earth's space and resources: we share the air, the surface, the soils, and the energy; we share corridors for movement (pavements, bike paths, car lanes) and the communal institutions and services, facilitated through national taxation (significantly for Scandinavia); we share public libraries, public transport, public baths, public parks; we share energy and space in apartment buildings, at cafes and laundromats etc., and the sharing economy has reopened the question of commons and right to access. These are just a tiny proportion of what is actually being shared, but they highlight the fact that villages, cities, urban regions - human settlements in general - are fostered by the movements and sharing of materials, resources, energy, data, capital, and consumption between humans and more-than-humans. (Graham and Marvin 2001; Sheller 2014b; Sheller and Urry 2006).

While I tried to understand what sharing meant, the matter that was being shared became more and more a focus of mine. As mentioned, the work I did in relation to the Sharing City Project also reflected these questions, but as the research project continued almost two years after the Sharing City Project finished, and due to the philosophical thinking space of research, I could explore those material thoughts further. The matter seemed to affect modes, ethics and politics of sharing; for instance, sharing a car is different from sharing a bed, sharing an animal or sharing food waste (as the next chapters will focus on), and each of these modes of sharing and the matters themselves affect both the ethical considerations and implications, as well as the legislative administration.

Looking for the kind of sharing economies suggested by the Sharing City Project changed the way I understood both the local, regional and the global, the urban, the rural, and all the in-betweens. These observations made it visible to me how deeply connected and interdependent everything is (Sheller 2014b; Sheller and Urry 2006). I remember sitting at my desk, and while realising this, the high-rise

building I was looking at outside my window changed. The building was suddenly just a representation and temporary manifestation of a manifold of flows of energy lines (water, energy, internets), the bricks connected to rural stone landscapes, tilework and construction workers, and the windows made me wonder what windows are actually made of (Graham and Marvin 2001; Marvin 2006; Sheller 2014a; Tsing 2015). This kind of wondering started for each of the materials I saw on the building, and while it was fascinating it was also exasperating because where do we begin and end the search. And as everyone and everything, every movement and root, and every process seemed important to make this possible, everything mattered (Massey 2005). This perspective was helpful to understand the relationalities and temporalities of that the sharing economy in relation to the materials, cities and landscapes had brought along. From these perspectives the 'sharing' of the sharing economy made me understand how "both cities and life itself are created from the movements and exchanges of materials, resources, energy, data, money and consumption, both *in* places and buildings and *by* and *between* people. Life seems shared and the practices of the sharing economy expose these movements. From this perspective, *sharing* can be said to set the table for the existence of cities and society." (Fjalland and Grave 2017:12).



Troubles getting heard

Throughout the Sharing City Project, I experienced and observed a theoretical and practical conceptual conflict between the local and global. The municipalities were not interested in the global sharing economy debates focusing on companies such as Airbnb and Uber, and at the final conference, one participant also expressed that they (the municipality she represented, Sønderborg) did not see themselves within the global urbanisation agenda that another speaker had talked about, and she expressed a deep frustration of being left out of maps and agendas, amongst other things (fieldnotes, November 2016). Furthermore, there was a narrative that the sharing economy was this wave that would come and take over whether we liked it

not. My argument at the same conference, where I also presented the results from the project, also communicated in the final report (Fjalland and Landbo 2017b), was that there could be no ‘global wave’ if there were no local practices. There seemed to be a global narrative and movement of thoughts about the sharing economy that the actors connected to, but the practices are taking place within local places and it’s those practices that give value, meaning and practice to the globally connected story, and this is how they seem to feed, cultivate and develop the global-local practice. Although the municipality did not see themselves as a global actor or connected to a global movement, there seemed to be a continuous mutual affection between the scales, as the global movement would not be there if it wasn’t for the local interpretations, practices and disruptions nurturing “it” that then again sends inspiration to and throughout the local practices and places.

To refine this argument, Sarah Pink (2012) has studied the Cittaslow movement, and I find some parallels between her findings and the global movements of the sharing economy as well as environmentalism and the locality-based practices (Massey 2005) of the participating municipalities and innovators, such as Hegnsholt Farm, the Compost Messengers and the Urban Harvest. Pink argues that the discourse of Cittaslow interweaves a combination of the best of the old and the best of new, and that those practices “have implications for other related places and the localities with which they are entangled. They are part of a place that extends beyond a fixed locality.” (Pink 2012:121). Furthermore, Massey (2005) invites us to think of localities produced in the nexus of global and local practices – “constructed out of a particular constellation of social relations, meeting and weaving together a particular locus” (Massey 1994:154). Together these approaches to understanding places and practices, and understanding sharing activist practices as those I have observed within the Sharing City Project to capitalist and industrial logic, invite us to consider the relationality between the global flows and processes of knowledge and stories and the locality-based practices, which makes

the sharing economy, not a 'global alien' disrupting the localities, but rather a movement that cultivates global-local activist practices.

Different political 'colours', ideologies, desires and values were clear in the discussions about the sharing economy and what the different people wanted to do with the sharing economy. Throughout the Sharing City Project, the discussions represented a clash or colliding stories of values, templates, and rationalities. As I described in the debate with the national politicians at the midway-conference in September 2016, the partners (municipalities and innovators) of the project were bored of the "external" debate among the national politicians that too often seemed to base their assumptions and claims on a press coverage of the sharing economy that mainly focused on Uber and Airbnb. The actors within the project considered the external judgements to be too impulsive and too limited as interpretations of the sharing economy.

At the final conference in November 2016, the Sharing City Project partners interpretation of the sharing economy as an inclusive, exploratory tool was met with great scepticism by those outside the project, a critique that assumed the sharing economy as hostile to the Danish welfare state and mainly a practice for making money. This is very true in relation to some of the sharing economy practices, but only a few within the Sharing City Project. The sceptical critique was among others formulated by the conference moderator who, as I experienced, continuously wanted to repeat and entail that particular neoliberal story about the sharing economy. For instance, this became clear as I presented the findings from the project and the municipalities presented their work, and he kept asking if people were not just in it to earn extra money for themselves. In this situation and others, the communal values were never considered real incentives or real conclusions, just nice attempts. A conversation followed more or less like this (fieldnotes, November 2016):

Moderator: "It all sounds very nice and idyllic, but really, don't the people and the companies just want to earn extra money for themselves?"

Me: "No, what we found is that earning money is just one incentive among many." Moderator: "It is like you do not want to answer the question. Isn't there anything bad about sharing economy? Isn't the true incentive that they just want to earn money?" Me: "I think I am answering you. There are more incentives than just earning money, and yes, there are big companies drawing value out of the country, but there is also so much more."

During and after the conference, I was annoyed with my inability to communicate what we had found, observed and experienced, and for months after the conference, I kept wondering why it was that the values and practices, their theories of economy, environment, collaboration and responsible co-existence, were perceived as unrealistic despite the ways in which they were real. The observed and experienced practices had a hard time getting recognised as meaningful, sensible and true, and it was clear that there was another clash of stories happening. With the Sharing City Magazine (Fjalland and Landbo 2017c), we told the many different stories of the projects, people and practices within the project, and we had some more analytical essayist chapters where specific themes were discussed by ourselves or external researchers. We chose this format and style to reflect the situated and relational practices as we also wanted to avoid using extrapolations or other rational logics, languages, and ways of storytelling that would create a linear story 'closing up' the stories about the sharing economy.

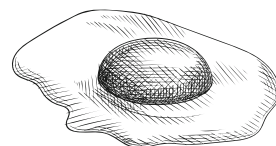
Sandercock's (2003) perception, from a planning perspective, about stories³ seems central to the kind of negotiations that unfolded throughout the Sharing City Project and further stretch the negotiations about the human-animal relations at Hegnsholt and legalising food waste as

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3) Sandercock used 'stories' in a different way than I do. As described in both chapter 1 and 2, I would argue that Sandercock's understanding of stories is similar to what I would define as a narrative as it rather linear and structural. I continue to use Sandercock's argument about 'stories' in relation to 'planning' as I would argue that planning is performed rather than structured and does not consider the non-narrative perspectives.

feed for livestock that I will go more into in the next chapters. As mentioned, at the final conference where the magazine was launched, we experienced this clash of stories again and I left the conference rather unsatisfied that we had not been able to ‘convince’ them of the importance and realities. Sandercock argues that stories are essential because “planning is performed through story, in a myriad of ways” (Sandercock 2003:12). Mikulak (2013) also depicts the importance of understanding stories, though slightly different from Sandercock, because the way we story and the language we use about matters such as capitalism and nature have consequences for politics, places and practices – they reflect the normative entanglements of political aims and decisions, the design of places, and the sense-making of practices (Fjalland 2018b). Therefore, we must be concerned with how stories are told, and whose stories are told, and why they are told. Regarding this, a question of presentation, of storytelling, is therefore of significance because the way our stories are composed reflects and helps constitute realities.

I suggest that the transformative gesture of stories lies in their inherent ability to produce, reproduce, and cement certain normalisation and justification of realities—social, cultural, and economic orders – and therefore, at the same time, they also hold the potential to question these realities (Fjalland 2018b). This understanding of stories suggests that those who ‘write culture’ suggest how ‘reality’ could be different, and this in itself can endorse a mobilisation of the cultural imagination. The stories this study has heard and observed ought to inspire us to rethink how to share this planet with earth-others reparatively; stories that enact connectivity, entangle us in the life of others, spur imaginations and response-abilities, reparative possibilities and livable futures (Gibson et al. 2015:ii).



Spaces for response-abilities - Turning towards rebellious waste, food and urban-rural relations

As the months went on after the Sharing City Project, I consequently chose not to write to convince with the same logic, style and lecturing. In line with the earlier mentioned ideas of how Lejre tackled the sharing economy and 'Ecological Municipality', I chose to try to write and tell the stories and histories of the practices, projects and people (Fisher 1979; Le Guin 1986; Haraway 2016; Mikulak 2013; Tsing 2015; Tsing et al. 2017). Within the Sharing City Project, 'alternatives' seemed to hold a connotation of being not-serious or unrealistic that left these "alternatives" in a kind of shadow of harmlessness (fieldnotes, July 2016). Among others, Amitav Ghosh (2016:9) argues that "climate change is also a crisis of culture, and thus of imagination" and to a great extent throughout the Sharing City Project, I experienced how invasive an economic, logic rationality ran through and blinded or shadowed our (in the team of gathering and communicating knowledge) ability to see the practices and theories of the partners as actual and possible.

I had to argue hard to refuse to condense their actions as pretty alternatives or measure their actions in relation to cost-beneficial analysis' or similar measurements because I felt that they would not fit into those models. Also, it was my experience that common stories of the sharing economy as creating more inequality and promoting the neoliberal agenda of privatisation also blurred the practices of those involved in the Sharing City, and it might be that their practices do not fit a common story about that kind of sharing economy, but this does not only neglect but reject the actual practices. If I wanted to communicate the transformative and rebellious aspects and gestures that I found both within the Sharing City Project, Hegnsholt Farm and Lejre Municipality, it felt like we needed a different understanding, other stories and words for these practices and organisations. Inspired by Tsing (2015), Gibson et al. (2015) and Bennett (2001), my argument is that we might have to look into the shades and shadows for the reparative and response-able practices.

Throughout the study I have sought to understand the practices of Hegnsholt and Lejre (through Tina's thoughts), their language and stories, and how they seem to practice a kind of mundane, peaceful and slow type of *activism*, a kind of response-ability, and this is what creates the basis for the stories in the following three chapters. I found inspiration in Pink's (2012:13) work with the Cittaslow movement, where she depicts how everyday practices can be activist and how this understanding might contrast immediate ideas of activism as something abrupt and volatile. She suggests that for us to understand and acknowledge a kind of everyday activism through which sustainability might be reached, Pink (2012:7) writes that "everyday life and activism are implicated in the making of places in unique combinations with other processes; and it understands the persons, representations and material culture of everyday life and of activism as always being in movement".

Hegnsholt Farm (that I am going to go into more detail on in the following chapters) is a private actor and run as a business, and furthermore, the practices and considerations of the public-private collaborations that Tina described, had been stirring up the anti-capitalist theoretical thinking I was used to. As I talked to Tina from Lejre Municipality specifically about this after the Sharing City Project had finished, she explained:

Before, I used to work like... I am educated with this very problem-oriented focus, which means analysing a societal problem as; what is behind this problem and what leads to it, and so forth. But I experienced that this way of working quickly becomes immense and unreachable because the analysis always leads to a place where you never are yourself. You are never part of those [places and practices] that then can do something. And you are kind of left paralysed. If you work more focused on solutions and possibilities, then you are constantly focused on that there is all this [she opens arms to visualise a big amount] that we right here cannot do anything about right now and that have to wait. But then *here* [she points with her finger], *here* there is something we can do, and *there* one can see oneself become part of a solution. And I actually think that this has been the magnetism for many in 'The Organic Municipality' and I also experience this in other projects. That suddenly, there was a place where a lot of

things could be done and collaborated, and things actually happened. From sitting and staring at all the bad that can happen, it is about moving the gaze towards the places, where something is being done and can be done. From problem-oriented projects to solution-oriented projects.

This is what empirically have led to this study's idea about the response-abilities and reparative practices, as those places that invite us to do things, open the imaginations, go beyond paralysis, these gestures or invitations where our response-abilities can vent, grow and cultivate. This is not just a naïve approach or about closing our eye to the darker apocalyptic stories and practices that still keep unfolding (Hodson and Marvin 2010). What we need is, as Tina explained, to keep the bigger story in mind, find the places where we can respond and tell those particular, situated stories as these reflect and affect the landscapes and places that we are part of transforming. And, many stories matter, they help to think of places that those stories relate to and speak of as events: "a constellation of processes rather than a thing. This is place as open and internally multiple. Not capturable as a slice through time in the sense of an essential collection. Not intrinsically coherent" (Massey 2005:141).

While there are practices of the sharing economy (or whatever we should name the multiheaded dragons) that are working on the principles of neoliberalism, there are also kinds of the sharing economy that has made us rethink and reorganise the ways resources, environments and landscapes are storied, organised, distributed, valued, accessed and used – including shared human and non-human resources or commons like water, energy and food. This kind of sharing economy make us remember how much humans and non-humans share and are related and bring light to the ethical questions and politics of power, wealth, rights of access and rights to resources and places.

Throughout the next chapters, I will go deeper into one of the six themes of the Sharing City and focus on 'share waste', but in particular, in relation to the work of Hegnsholt Farm and the municipality of Lejre (where the farm is also located), which both participated in the Sha-

ring City Project. Johanne Schimming started Hegnsholt Farm around 2012 when she chose to leave her previous position after 11 years; she felt that her career development had stopped, and her responsibilities were getting smaller and smaller. Also, with a one-and-a-half-hour commute, three kids and a self-employed husband, life was hectic. She did not know what she wanted to do and the choice of working with hens happened by coincidence. She had a few hens herself and enjoyed how she could feed them leftovers and how they produced eggs.

Johanne and her family lived on a defunct farm with underused land and buildings, and as her father was a farmer, she started thinking about creating a farm that primarily had hens and chickens. She began by making an agreement with the municipality of Lejre with regards to lending hens for nurseries, kindergartens, and nursing homes. The idea for this “was about sustainability and animal welfare. For the kids, it was about reintroducing animal welfare, ecosystems, the process from farm to table, teaching them to be critical consumers – that’s where it started” (interview with Johanne, March 2016). Since then, Johanne got more interested in the agricultural part of keeping hens and chickens her way and desires to do so is the focus of the next three chapters. There, I will go further into the practices and stories of Hegnsholt Farm and Lejre Municipality and how they try to transform agriculture – a human-nature relation – into a more environmentally responsible practice.

Out of the seven municipalities that participated in the Sharing City Project, Lejre Municipality and their representative Tina Unger were the most engaged with the environmental aspects and possibilities of the sharing economy with a significant focus on food production and enhancing urban-rural relations. In the following chapters, I will go more into Tina Unger’s thoughts as the Project Manager of Lejre Municipality, and her thoughts and considerations about a civilian and public servant’s abilities to respond to environmental change and roles in a sustainable transition.

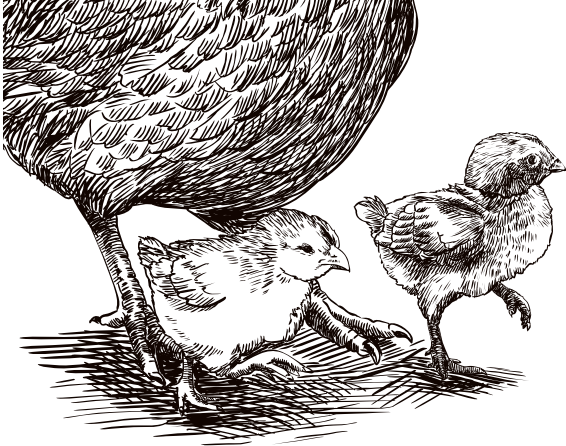






4. Humanimal relations¹

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1) In this chapter there are some sentences and arguments that have been published in 'A Carrier Bag Story about (waste) food, hens and the sharing economy' (Fjalland 2018). In this chapter, I develop these further and unfold the histories.



Within this chapter, I will explore what we can learn about the reparative and response-able human-nature relations from the human-chicken relations at Hegnsholt Farm. I have named this chapter ‘humanimal relations’ in keeping with the essential arguments emerging from relationality, mutual domestication and companionship between humans and non-humans. I will study Hegnsholt’s practices as humanimal relations that differ from a more dualistic and dichotomous human-animal relation playing out within industrial, agricultural logic. Hegnsholt is a seven-year-old small-scale organic farm with around 1,200 hens, some pigs and sheep located within the municipality of Lejre, approximately 45 kilometres from the inner city of Copenhagen, established and run by Johanne Schimming. The animals at Hegnsholt Farm are raised in accordance with organic standards and with a spotlight firmly on animal welfare, quality of food, and the minimisation of food waste by using it as feed instead – i.e. waste feed.

Animal welfare is essential at Hegnsholt: chickens grow up with their mothers, have access and are able to roam around free outdoor space, and eat natural food such as leftover vegetables or bread that come from the restaurants and eateries that Hegnsholt supplies, or from supermarkets, grocery stores and nearby farms.¹ Although waste feed

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1) The number of partners in the exchange has varied over the research period. In February 2018, Johanne had agreements with 14 places. On occasion, Johanne has also received left-over meals and processed food from..

is an essential part of Hegnsholt humanimal practices, the regulatory conflicts of doing so are comprehensive and warrant a further investigation which I undertake in this chapter. The chicken meat and eggs from Hegnsholt are sold as and are commodities, but Hegnsholt treats the chickens and mother-hens as more than mere objects of exchange. At Hegnsholt, the chickens and hens are also perceived as emotional and fellow beings, wherefore Hegnsholt constantly seeks to create environments for the chickens to thrive in and enjoy.

The chapter discusses human-chicken relations by drawing out key issues of domestication, commodification, alienation, care and compassion, rooted in feminist material as well as historicist and practice-oriented conceptual debates. Throughout the next pages, I will explore the values and practices of the humanimal relations at Hegnsholt, which involves a history of the domesticated chickens, poultry farming and egg production. Situating Hegnsholt's humanimal practices in a historical context is necessary in order to understand what Hegnsholt is responding to. The chapter draws on material from interviews and field-notes gathered while following Johanne from Hegnsholt closely from December 2016 to October 2018. I am using standard procedures within modern poultry farming as described by the Danish Veterinary and Food Administration, The Danish Food and Agriculture Council, different studies and encyclopaedic accounts, amongst others. I use these to place Hegnsholt's actions in relation to a wider set of policy functions and frameworks – not to judge or compare, but to understand the larger landscape that Hegnsholt operates at the edges of and responds to.

Going into a world of chickens and eggs

Two and half years after I became involved with Hegnsholt, I first realised that domesticated chickens are the world's most populous bird. Almost 60 billion chicken are killed annually, the geological traces of which catapults the chicken into the midst of debates exploring the earthly significances of the period we live in. According to an article in *The Guardian* (Carrington 2016), the chicken “bones could become

the key fossil evidence for the dawn of the age in which humankind came to dominate the planet". I am not familiar with the biological or geological consequences of that many bones, but the bones leave traces of current anthropogenic consumption and industrial production practices and reflect the human-animal relation of our current time. Therefore, I find it even more important to study alternative human-chicken relations that could inspire reparative futures. Hegnsholt is a small-scale Danish local farm, and is, therefore, a particular case from which I draw context-dependent knowledge (Flyvbjerg 2006).

An obvious question to this study and one that I have been frequently asked throughout this study, is if 'we' can feed the wider population with this kind of practice? This is a question I will address in different ways throughout the next three chapters, and one short reply could be, that the current system and practice do not feed the wider population and is socially, economically and environmentally unsustainable (Nielsen 2016; Shiva 2016). Therefore, I believe it is important to study alternative practices – alternative in relation to how the economy is built, agricultural practices, and biosocial concerns – to the industrial methods, and that these practices mainly take place outside of an industry largely dominated by multinational corporations such as Monsanto.

Furthermore, I find it important to question how we ended up in a situation where the consumption of chicken has become a geological force. What does this say about current culture-nature relations and our response-abilities in this matter? How and why did we arrive at this moment, where chickens seem to be reduced to 'poultry' and 'egg-production' (with no hens) – as pure outputs for humans? A situation where chickens seem to be torn from their lifeworlds? Kloppenborg, Hendrickson and Stevenson (1996) suggest a 'foodshed' as a framework for a certain kind of thinking and acting that seek to encompass the "physical, biological, social, and intellectual components of the multidimensional space in which we live and eat" (1996:41). They add a normative meaning to the term 'foodshed' as they use it to

analyse the existing global food system critically, and to imagine “the shapes an alternative might take, and to guide our actions” (1996:34).

Framing the ‘coming into’ is about the process of entering that place between the existing and the alternative, and I use this framework to go into a world of humans, chickens and eggs. This is important to be able to understand chickens and eggs are more than mere objects of exchange, and, therefore, it is about connecting commodities with life-giving conditions and their lifeworlds, which will create a space for an ethical questioning of multispecies well-being, affection and compassion, of what counts as life and under which conditions these lives should be lived. Going into a world of chickens and eggs is about tying ties with these beings and the lifeworlds that we are already part of. From this perspective, we might be able to question how the current logic and practices of modern poultry industry also reflect and affect humans in return.



In Denmark and most of the Western/Northern worlds, consumers usually encounter chickens first at the supermarket. Chicken meat and eggs are commonly bought in supermarkets. Those packages of bright pink meat do not give much information about the animal the meat once belonged to; how the animal lived, what the animal ate, how the animal was slaughtered, processed and packed into a humanly edible matter. Similarly, the eggs show few traces of the processes they originated from, uniformly white or light brown, labelled as small, medium or large. There might be some symbols and pictures signalling whether the eggs came from hens that were caged, barned, or free range and whether they were fed organic or conventional feed. The egg-laying hens have other conditions than edible chickens and broilers, and the ones you can purchase in a Danish supermarket are classified either as barned, organic, or free-range. Sometimes they are both organic and free-range, and they can also be organic but not necessarily have stayed outside. The interpretations of what makes an outdoor environment vary materially, ecologically and aesthetically, but access to an outdoor environment is required to live up to organic standards. One Wednesday afternoon, I looked into the cold display counter

at my local supermarket and there were only a few whole chickens, some packages with chicken legs and wings, but the main part of the chicken meat selection consisted of chicken breasts. I asked a member of staff who was filling up the counter why the division was like that, and he said it was because they mainly sell the breasts. That piece of meat leaves little information and knowledge about the animal that the meat was part of. In addition to this invisibility of the animal that once lived, you may also find bags of deep-frozen, marinated chickens wings (hot wings) or bags of chicken nuggets, bite-sized pieces of chicken, blended with different spices and additives, coated in batter, deep-fried, shapeable as you like. The 'invention' of the chicken nugget is interesting and is an example of the development, logic and practices of modern food production².

Animal welfare is essential for Hegnsholt, but the chickens and eggs

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2) Chicken nuggets were, according to (Rude 2016), invented (so it is written using this techno-word) by Robert Baker, a professor at Cornell University (USA) in the 1950s, as he wanted to find a product that could expand the poultry market. During war and post-war time, scientists, farmers and governments had used much time and money to make chickens affordable and accessible. But the consumers were not buying enough chicken, and they continued to explore the varieties of chicken products and experiment with processed food. Baker's project was part of this period of food production, and apparently, Baker called his invention 'The Chicken Crispie'. In the 1970s the fast food chain McDonald's was looking for an alternative to beef due to the newly acknowledged relation between cholesterol, saturated fat, and heart diseases. McDonald's found Baker's "invention" suitable for its new ambition. The company formed a secret group to develop this poultry product further, using the processor Keystone Foods, amongst others. After prototypes and taste-testing that showed good market potentials, according to (Rude 2016), "McDonald's tacked together a new multimillion-dollar factory dedicated just to these nuggets and called in the big guns at Tyson Foods to help them ensure a steady supply. Tyson in turn developed a custom breed of chicken for the nuggets, "Mr. McDonald", that had an even larger breast than the Chicken of Tomorrow. "The Chicken McNugget" was released in 1983 and quickly became a global phenomenon. By looking onto the description ingredients on a bag of chicken nuggets (from the company Kykling) in my local supermarket, I understand why the description of the chicken nuggets is described as an (technological) invention: 60% chickpeas (21% minced chicken meat, water, chicken skin, wheat fibre, corn starch, soya, salt, stabilisers (sodium alginate, calcium sulphate, diphosphates), white pepper, hydrolysed corn protein, glucose syrup, dextrose, salt, meat flavour, sunflower oil), 40% pan (raspberries (wheat flour, salt, spices, yeast, turmeric, paprika), wheat flour, water, rapeseed oil, potato starch, modified potato starch, salt) <https://mad.coop.dk/frost/koed-og-fisk/fjerkræ/kyllinge-nuggets-5706911017063>.) (Revisited Nov. 9th, 2018). This could indeed also be called Franken-food, with reference to Frankenstein, and this is a food production practice that increases day by day, globally. I will come back to this in chapter 6.

are also commodities for sale and animals living in captivity. This struck me as a contradiction initially, but it is not that simple. Within the next sections, I will unfold a history of relations between humans and chickens (and eggs), and while these relations are ancient and essentially embodied, they have changed throughout time. Hegnsholt's animal welfare practices cannot be reduced to 'humans have always domesticated animals'. Rather, the story I'm suggesting is about how humans and non-humans are both *domesticates* - an active and relational verb - that are continuously founded in collaboration (Haraway 2008, 2016; Mikanowsky 2016; Scott 2017). In light of the history of human-chicken relations, modern human-animal relations in industrial agriculture that leave considerable geological traces seem to be neither as inevitable nor obvious as capitalist and evolutionist stories would have us believe (Fisher 1979; Gibson et al. 2015; Mies and Shiva 2014; Tsing et al. 2017). I am seeking to critically address the industrial logic and practices by telling the stories of Hegnsholt humanimal relations within a greater history as well. In this wider and eclectic perspective, Hegnsholt's practices become reparative on a broader scale, and I am to claim that the human-animal relation that is practiced within industrial logic is new in the long history of human-animal relations. In this history, the humanimal practices of Hegnsholt are not that extravagant nor alternative. The following sections will seek to unfold this claim, and this next section will show the historical and global routes and roots of chickens and eggs (of food).

Historically, food has moved slowly compared to the high-speed food movement of today, but nonetheless, what we eat has always moved, mutated and transformed according to environments and cultures. Aims and stories of authentic eating in relation to fixed ideas of the local are in a long time perspective rather dubious. Yet local food and farming cultivations and practices matter as they are essential to understanding momentary cultures of eating, health and landscape transformations. For instance, it is a Danish national story suggested by the parliament, that authentic Danish food mainly consists of pork and butter (our main agricultural industries), and while this was a

cultural eating practice for a certain amount of time, this cannot be claimed to be *the* Danish eating. The New Nordic Kitchen tales (that Hegnsholt also connects with), amongst others, seek to counterargue that tale, for instance, by cultivating ancient or old local sorts and breeds (heirlooms). As mentioned, foods have always moved and calling one breed or sort significantly 'Danish' or 'Nordic' of course depends on dating. Although some try to grow a more sustainable authenticity by cultivating biodiversity, shortening food miles and challenging the very narrow variety of sorts and breeds used within industry (Just and Strand 2012; amongst others Shiva 2016). Cultural eating practices change – along with the mobilities of food and introductions of new exotic ingredients – and have always changed. Because of this transformative character of food cultures, we might also be able to create more response-able and reparative production practices that make it possible to have food on the table. The following story is about relationalities and connections, movements and transformations that I will argue are helpful to imagine reparative futures. I am adding breeds, biodiversity, miles and movement to the Carrier Bag.

Routes and roots of humans, chickens and eggs

The modern chicken (*Gallus domesticus*) is generally considered to originate from the wild red junglefowl (*Gallus gallus*), that lived in Southeast Asian jungles between East India and Java. Others believe in a polyphyletic or hybrid origin from *Gallus gallus*, *Gallus sonnerati*, and *Gallus lafayettei* (Blench and MacDonald 2000; Eriksson et al. 2008). Furthermore, it is suggested that the chicken was “domesticated” between 7,000 and 10,000 years ago, supposedly somewhere between what is today East India and Java, as it was a poor flyer and easy to catch for the hunter-gatherers (Blench and MacDonald 2000; Carrington 2016; Jensen 2013). Together with dogs, sheep, and pigs, chickens are considered to have been part of the cohabitations with humans long before agriculture (Neolithic period) (Mikanowsky 2016; Scott 2017). Over the following millennia, the bird moved and was carried all over

the world, and “in view of both archaeological and linguistic evidence, it appears that chickens did not spread through India but rather around it – heading north-eastward from China and through central Asia north of the Himalayas.” (Blench and MacDonald 2000:497).

Archaeological discoveries indicate that the chickens must have reached European borders – Romania, Turkey and Greece - around 3,000 B.C.E., and only reaching the Western and Northern Europe territories around 1,000-500 B.C.E. Studies indicate that during the European Iron Age (1,100 BCE–500 A.C.E.), the domesticated chicken became well integrated into households and the size of the bird seems to have grown due to the breeding techniques and husbandry of the Romans (Blench and MacDonald 2000). According to a Roman writer, Lucius Junius Moderatus Columella who lived in the time of the Emperor Nero (54-68 A.C.E.), we know that Romans were not only domesticating but also breeding chickens, and that the chickens of the Roman Empire travelled all over Europe both as fighting and entertainment birds as well as for eating (Juhl and Falgren 2012).

During the medieval period, it is believed to have become more common to rear chickens in towns, along with goats, pigs, sheep cattle, and other animals, and that the dietary significance of chickens for humans grew. Furthermore, it is believed that humans have been eating eggs since the beginning of humankind, including eggs from peafowls, pigeons, ostriches, quails, and more rarely, eggs from plovers, partridges, gulls, turkeys, pelicans, ducks and geese have been gathered and consumed (Stadelman 2000). Due to the empirical context of this research, I am focusing on the consumption of avian eggs, which constitutes a considerable field of research in biology, culture, and nutrition (Stadelman 2000). Only a few recipes from the ancient Greeks indicate that eggs were used in cooking, whereas there are recipes of custards, omelettes, hard-boiled and fried from the Roman period. However, eating eggs has been avoided in many other cultures because they were considered filthy and tabooed (Stadelman 2000). According to Blench and MacDonald, the increase in domesticated

chickens in towns and villages may have resulted in a size-reduction as “chickens [in towns] were often left to forage amid domestic waste and [due to] less labour-intensive poultry-rearing techniques” (2000:497), and they highlight that studies indicate that the birds – in terms of weight and bone structure – may have been better nourished in rural regions. Some researchers in the history of the chicken believe that the chickens in Denmark might not have come via the Romans but from Russia, and others believe that the oldest breed in Denmark, Danish Landrace (also found at Hegnsholt), look similar to the breeds of the Germanic tribes (Juhl and Falgren 2012). From the Iron Age up until the late 1800s, chickens were a common view in the agrarian Denmark (which Denmark mainly was) and moved freely around the fields, farms, courtyards, and found food in the dunghills, below bushes, and in the chaffs of barn floors. They mainly lived on leftover food. During the winter they were fed a bit of barley to help them make it through the winter (Juhl and Falgren 2012).

The feed is an essential welfare matter at Hegnsholt, and I find it important to highlight that it has been a historical widespread custom to have chickens walk around freely and eat leftovers from households and farms. Pigs, hens and chickens, and cattle were essential parts of the farms as they were rather self-sufficient, cleaned up space by eating the ‘waste’, eating from fallowed fields with vegetation or other humanly inedible foods, for instance, roots and weeds. These were then transformed into eggs, meat and milk for humans to eat, and these animals and their ways of living and consuming were a cheap source of protein. Johanne has indeed been inspired by this custom and private households keeping a few hens is a widespread practice in Denmark (Jensen 2013). Johanne elaborates:

“I had chickens myself and I think there are so many pleasures and pros in keeping chickens. Among other things, that they can live, more or less, on one’s vegetable remains and leftovers, and you get eggs out of that. It does not require much, and in most gardens, you will probably have room for them. And that’s what we started with, but now we also have pigs and sheep.” (interview with Johanne, March 2017)

The next chapter, 'Fermenting sterile desires', will follow the 'feed' practices and the current illegality of feeding livestock with residuals. I mention this companionship between chickens and humans as I find it central to understand humanimal relations. Anemarie Mol and John Law argue that feeding pigs from catering waste was made illegal in England in 2001 due to a large outbreak of foot-and-mouth disease, which put "an end to an English history of human-pig-intimacy [...] that goes back 500 years" (Law and Mol 2008:137). This could also sound like a story about the humanimal relations of Hegnsholt Farm, that draws on historical lines which:

simultaneously evokes a romantic version of metabolic intimacy in which people, cottage dwellers, ideal-typical Victorian rural labourers, fed pigs with their kitchen waste, and subsequently fed on them in turn. [...] A piglet was bought in spring and lived in a sty in the garden. It was fed the family's kitchen waste and got more or less friendly with the family members. And then, as it got bigger, it was fed on potato tops, Swedes and boiled potatoes from the garden. Family members might collect other food from the lanes: sow thistles, snails, dandelions. Then the pig was fattened off with some bought-in barley meal. And finally, it was slaughtered in a ceremony, usually in November, which culminated with everything, absolutely everything from the pig, being consumed. (Law and Mol 2008:137)

Returning to pre-industrial times (and current non-industrial practices), the egg production was significantly lower than today, both because of the breeds and the feed (Juhl and Falgren 2012). From the fall of the Roman Empire up until the 16th-century, there is little knowledge about the development of the consumption of eggs (Stadelman 2000). The chicken's production of eggs is influenced by the length of the day and for this reason, there were next to no eggs during winter in the northern European regions. Therefore, in pre-industrial times, eggs were a luxury and nutrient-rich food that returned as the days got longer during spring and the pantry was getting stocked again. Eggs also hold a noteworthy history of symbolism and mysticism in both pagan life and Christian Easter celebrations. Eggs were a symbol of new life, fertility (the fertility goddess Eostre), maternity, rebirth,

the return of the Sun God, and the Christian symbol for the resurrection of Jesus, among others (Stadelman 2000). In the 18th and early 19th-centuries, chickens and eggs entered the European culinary culture considerably and were significantly included in the diets and dishes of the time. According to Stadelman (2000), there was such an increased interest in the bird with the emergence of modern science and its *breeding techniques* that the time has been characterised as “The Century of the Chicken” (Smith and Daniel 1982 in (Stadelman 2000:501)).

An intermezzo with domestication

Before moving forward in history and into the time of industrialisation, where the intense breeding of chickens increased, I need to dwell a bit on the *domesticus* of the *gallus* we consume because this seems to have a profound influence on the development of today’s poultry farming. The concept of domestication immediately evokes associations of execution of power in terms of exploitation, domination, and colonisation, and, therefore, seems to conflict with ethical dilemmas of animal welfare and coexistence of multispecies. The term *domesticate* is normally understood as a one-way verb, an active verb taking shape in a direct object. An example could be the sentence “homo sapiens domesticated the chicken”. Nonetheless, according to the political scientist and anthropologist, James C. Scott, this understanding overlooks “the active agency of domesticates. It is not so clear, for example, to what degree we domesticated the dog or the dog domesticated us.” (Scott 2017:19). Scott’s research brings attention to political economy, comparative agrarian societies, theories of hegemony and resistance, peasant politics, revolution, theories of class relations, and anarchism, and I have been significantly inspired by his book ‘*Against the Grain – A Deep History of the Earliest States*’ (2017). In this book, he discusses the hunter-gatherer and sedentism and challenges the common narrative that sedentism was chosen to (finally) create a more secure way of living than hunter-gatherer lives. The first agrarian states were born out of accumulation of domestications, for instance of plants (grains, amongst other things), animals, humans as slaves and later women. He shows



the insecurities of sedentism as the vulnerability of harvest, unforeseeable epidemics due to crowds, and slavery, amongst other things. I initially found his work interesting in relation to the Carrier Bag Theory (Fisher 1979), and still do, but then with regards to 'domestication' in relation to the development of the humanimal idea of this study.

Scott elaborates on how domestication has changed the genetic character and morphology of crops and animals (Scott 2017:79) around settlements or households, thereby creating new and artificial environments "in which Darwinian selection pressure worked to promote new adaptations." (Scott 2017:20). Goats (in the same way as chickens), for instance, "got smaller, more placid, less aware of their surroundings and less sexually dimorphic", which makes Scott question how humans underwent a similar process: "how we also got domesticated by the domus, by our confinement, by crowding, by our different patterns of physical activity and social organisation?" (Scott 2017:20). In relation to current environmental change it can be argued that it seems like domestication is *Homo sapiens'* enduring pursuit of shaping the entire environment to its own advantage. Yet, according to Scott, 'domestication' ought to be "understood as an expansive way [and] given our frail knowledge about how the natural world works, one might say that the effort has been more abundant in unintended consequences than in intended effects" (Scott 2017:19).

It appears that domestication is neither fully intended nor a one-way human tool, as humans are domesticated as well. Recent archaeological studies indicate that, throughout history, species have changed from wild to tame multiple times. As domestication also seems to have changed humans, previous assumptions about the dominant role of humans in domestication are questioned and contested (Mikanowsky 2016; Scott 2017). For instance, Scott highlights how "commensals" (sparrows, mice, weevils, ticks, bedbugs) were not invited to share the pantry "but gate-crashed anyway, as they found the company and the food congenial" (Scott 2017:19). These findings challenge standard civilizational narratives, culture-nature-relations, and the position of

humans as the “superior” species. Domestication came at a cost for the non-humans and humans involved³ and, while domestication in hunter-gatherer cultures seem to have been more collaborative, co-habitative and trust-based, they became more based on control and domination in agrarian cultures (Fisher 1979; Ingold 2000; Mikanowsky 2016; Scott 2017). In what is thought of as one of the world’s first villages (Çatalhöyük, Turkey), archaeologists have found a man buried with a lamb in a pose they find suggestive of kinship with non-humans (Russell and Düring 2006). Later in the early agrarian states, this human-nonhuman relation changed, and Scott argues that

one can perhaps see this early period as part of a long process, still continuing, in which humans have intervened to gain more control over the reproductive functions of the plants and animals that interests us. We selectively breed, protect, and exploit them. One might arguably extend this argument to the early agrarian states and their patriarchal control over the reproduction of women, captives, and slaves. (2017:12)

Among others, Fisher (1979), Ingold (2000), and Scott (2017) argue that hunters and foragers seem to have perceived animals more as sacred companions and through rites of sacrifice had to give back something (to nature or the gods or similar) as they had taken something. Sacrifices and beliefs have also been essential within agrarian cultures, where the humbleness and compassion for the nature that feeds them were due to the vulnerabilities of a ‘good’ harvest. Furthermore, as the farms used to be family driven, one generation wished to ensure that the soil would still be fertile for following generations. I want to highlight that I am not claiming that all industrial farmers do not care about their soil nor animals. Rather, it is about how capitalist and neoliberal structures of food production to a great extent penetrates every aspect of how the fields are maintained, and how farmers (world-wide) are increasingly

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3) In *Against the Grain* James C. Scott (2017) seeks to dislodge the narrative of the Agrarian Revolution and counterargue a basic narrative that sedentary life is superior to and more attractive than mobile forms of subsistence. He explores the supposed reasons and consequences of the (slow) transformation from hunting and foraging to agriculture.

becoming deeply bound to multinational corporations (such as seed producers and wholesalers) and in great debt to banks – the high number of suicides among farmers is striking (Nielsen 2016; Shiva 2016).

Fisher (1979), Ingold (2000), and Scott (2017) depict a (slow) shift in the human-nature relations with the agrarian states where animals (and plants) were conceived as servants to be mastered by humans – a shift that increased with the Great Enlightenment and the Industrialisation. This latter perspective still seems to permeate the contemporary industrial food production and food system. The reasons for practices and consequences of domestications are incessantly explored and discussed, and the attention to the myriad of questions related to the global environmental impact of the domestication of fire, plants, and grazing animals are growing. I am adding relational domestication to the Carrier Bag.

Deep history and deep ecology are not my specialties, but I have found it crucial to get a sense of some of the ideas flourishing in these fields in order to understand the current situation of food production and food systems. The deep historical, cultural, biological and ecological traces that chickens might have left, and the walking with ‘domesticated chickens’ and early practices of ‘domestication’ bring me to this study’s question about response-abilities. What interests me about the history of domestication are the ethical practices and questions about human relations with animals and plants, because they also inspire our current debates about “how to treat the environment”. Historical assumptions of this kind have pushed along ideas about evolution, domination, and natural selection (Fisher 1979) have naturalised and normalised some stories about dominating human characters and actions. Revisiting parts of the history of this edible chicken is, therefore, also about changing the future narrative – an understanding of historicity suggesting that to understand the present and redirect futures we must revisit and revise the past. I am adding humanimal compassion (of hunters, gatherers and “pre-industrial” agricultural practices)

Modern human-chicken relations

The humanimal practices at Hegnsholt might also immediately appear abstract due to decades of long instrumentalization of both agricultural practices and the sciences. An instrumentalization and human-nature separation that in the big story of agricultural history seems rather new, and to have shadowed and neglected the always already affective relations between humans and animals – both in the concrete practices of industrial agriculture and in the thoughts of human-nature philosophies (Haraway 2016). It is my hope that the following descriptions of modern Danish poultry farming (organic or not), which also includes descriptions of the conditions and practices at Hegnsholt, will help build some more concrete images. Within this section, I am trying to place Hegnsholt in the current modern landscape of industrial poultry farming. You might find the writings rather static and technical, but this was what the context seemed to call for somehow, which is a point in itself. It has been striking to see how language and word-use in writings about farming and agriculture changes when describing industrial methods. Mikulak states that “language is important because it can crystallise and naturalise certain modes of understanding the world” (2013:37), and, therefore, the language and introduction of economic and techno-scientific words, such as ‘resources’, ‘invention’, ‘productivity’, ‘utilisation’ and ‘efficiency’ in relation to non-human livelihood reflects and defines the current situation of human-animal relations; it shapes the language and imagination of what we, especially in the west, look for and perceive. This a storyline and perception that subsumes natural ecologies to economic logic. Therefore, my attempt is to write out the different storylines, so for now, let me continue the story about *Gallus domesticus* where we left off, in the early 19th-century.

The Danish agrarian history and development is a huge field and the space I am giving it is not adequate. Along with the industrialisation in the 1850s in Central and Northern Europe, farming was also slowly



industrialised⁴ and minor factory poultry farms began to appear. From around 1900-1950s, Denmark was Europe's largest exporter of eggs, reaching almost 100 million kilos annually (Jensen 2016). Eggs were brought from farms to packing facilities where they were sorted by size, look and weight and then exported (Jensen 2013). England was one of the main importers, but as it focused on self-sufficiency after the Second World War, the Danish export decreased and the industry was adjusted to mainly supply the Danish market. However, the consumption of chicken expanded enormously on a global level after the Second World War, as factory farming took over, and with this came intense breeding to adapt chickens to stay inside, become less aggressive, and increase egg production. Furthermore, this was also the time of introducing processed food (from the 1960s), which in relation to eggs meant that egg white, yolk and whole eggs could be found pasteurised in frozen, liquid or dried form. These products were mainly purchased by catering companies and factories processing other edibles such as prefabricated mayonnaise or cakes (Jensen 2016). Moreover, this was the period (1970s) when the earlier mentioned chicken nugget was invented.

After the Second World War, Danish farming was, like many other sectors of Western societies, even further industrialised, 'concentrated' and 'specialised' (Hansen 2016). In relation to poultry farming, actual egg production and production of broilers (breed for production) produced only for consumption were introduced. Broilers were '*developed*' (Jensen 2016) in the United States to quickly and efficiently meet the need for meat during the Second World War and were introduced in Denmark in the late 1950s. Today, the production is as follows: When chicks hatch, the young cockerels are sorted, killed, and, amongst

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 4) The (Danish) National Museum: <https://natmus.dk/historisk-viden/danmark/nationalstaten-1848-1915/industri-og-landbrug/det-nye-landbrug/>. The National Museum is a research institution under the Danish Ministry of Culture. It has the same status and requirements for research as other sector research institutes. The National Museum is Denmark's head-museum for cultural history and heritage, and the research of the museum contributes to the understanding of relationships between society and societal development, culture and cultural identity, as well as the interaction between humans and nature. (Revisited Nov 9th, 2018).

other things, used as feed in zoological gardens⁵, and the one-day-old females are taken from the incubators and placed together in highly isolated houses with climate control heated to 32 degrees Celsius.

In 1995, approximately 20% of Danish poultry farms supplied nearly 90% of the broilers in Denmark. This concentration created the need for large hatcheries with an annual production of around 50 million day-old chickens, plus related herds with parental hens for the production of hatching eggs (Jensen 2016). The livestock is managed very rationally and with a highly automated production. For broilers, fast growth and low feed consumption are important to ensure efficient production at a low economic cost, and as a result, the breeding effort has almost been unilaterally focused on growth. "From 1965 to 1995, the breeding time for reaching 1400 g live weight was more than halved, and feed consumption was simultaneously reduced accordingly," states Jensen (2016).

At Hegnsholt Farm, the chickens grow much slower and are only slaughtered when they are a minimum of 90 days old. In Denmark, the organic (industrial) chickens are in general between 56 and 81 days old when they are slaughtered (depending on which breed is used), and a conventional chicken is typically slaughtered after 35-39 days (and weighs between 1-1.5 kg). Watts (2014:394) describes the transformation of hatcheries in the poultry industry of the United States, and the emergence of the 'cyborg chicken':

In the 1880s there were only 100 million chickens. In spite of the rise of commercial hatcheries early in the century, the industry remained a sideline business run by farmers' wives until the 1920s. [...] Avian science has now facilitated the mindboggling rates at which the birds add weight (almost five pounds in as many weeks!). The average live bird weight has almost doubled in the last 50 years; over the same period the labour input in broiler production has fallen by 80 percent. The broiler is the product of a truly massive R&D campaign; disease

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5) According to the Danish Agriculture and Food Council, which is a lobby organisation that mainly represents the interests of industrial farmers: <https://www.lf.dk/viden-om/landbrugsproduktion/husdyr/aeg> (Revisited Nov. 9th, 2018)

control and regulation of physiological development have fully industrialised the broiler to the point where it is really a cyborg.

The concentration of hens is fewer in relation to egg production, but larger herds became possible due to high-tech cage systems with automated feeding, watering and egg collection, meaning that human labour is lower which leads to cheaper production costs (as human labour is more expensive). Several hens share a cage of which the design and the dimension of the floor area are regulated by law.⁶ According to the Danish Animal Protection Act, animals must be treated properly and protected as best as possible from pain, suffering, anxiety, and a lasting and significant disadvantage. In addition, a person who keeps animals must ensure that they are treated with care, including being housed, fed, watered, and taken care of in relation to their physiological, behavioural and health needs. The spaces and areas where animals are kept must be adapted to meet the needs of the animals, including having necessary freedom of movement and protection from the weather. In addition, the Danish Food Authorities have laid out rules and regulations for keeping animals for production for farmers to follow. The declaration contains a number of rules on personnel, supervision, handling of diseased and injured animals, record keeping of dead animals, medical treatment, stable climate, automatic and mechanical equipment, feed and water, and more. Other declarations direct conditions for animals living outside and those living inside, when and how.⁷

The living environment of the animals is central to Hegnsholt's humanimal practices. Hegnsholt's practices are responses to the modern, industrial way of keeping chickens and hens, and in comparison, I want to outline some of the conditions of the different varieties

6) This is the link for the Danish Food Authorities interpretation of the animal protection law for egg-laying hens: <https://www.foedevarestyrelsen.dk/Selvbetjening/Guides/Sider/Aeglaeggende-hoener-hvilke-dyrevelfaerdsregler-gaelder.aspx?Indgang=Animal&> (Revisited Nov. 9th, 2018)

7) This information is gathered from The Danish Food Authorities website: <https://www.foedevarestyrelsen.dk/Selvbetjening/Guides/Sider/Aeglaeggende-hoener-hvilke-dyrevelfaerdsregler-gaelder.aspx?Indgang=Animal&>

that can be purchased in the supermarkets: caged, barned, free-range and organic. I will return to Hegnsholt's practices afterward. The cage system is characterised by low cost as well as good hygiene with a low mortality rate, nonetheless, a large part of the natural and social behaviour of the hens become completely or partially impossible to display (Jensen 2016). For instance, there are examples of how chickens have lost their ability to be a flock, which can cause problems with feathering and cannibalism (Jensen 2013; Juhl and Falgren 2012; Stadelman 2000). To avoid this, the birds' beaks are trimmed⁸ but this is a declining practice. Also, new breeds are constantly being developed to create chickens that adapt better to industrial conditions. For instance, a less aggressive breed is being developed as a 'cage chicken' (Jensen 2013, 2016; Juhl and Falgren 2012).

From 2012, the conventional cages can no longer be used in countries within the European Union due to the critique of animal welfare. This led to the development of the 'stimulus enriched cage' that seeks to meet the hens need for dusting, bathing and movement. The so-called enriched cages have ridges, sand baths, chopsticks and cleavers, and the area per hen is around 750 cm², which is approximately the size of an A4 piece of paper. Eggs from barned egg-laying hens come from hens that are in flocks of 3,000 to 10,000 animals. The hens live indoors in stables with a maximum of 9 hens per square metre (net area), and while there are no requirements for windows in the stables, the hens must have herds and chopsticks and at least 1/3 of the floor area has to be covered with straw, shavings, sand or peat. Their beaks can only be trimmed before they are 10 days old.

For eggs to be certified as organic, the hens must have access to open-air just as the free-range hens. The main differences between the two types is that the organic hens are given organic feed and their

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8) Trimming of the beak is allowed until the chickens are 10 days old, according to the Danish Agriculture and Food Council, which is a lobby organisation that mainly represents the interests of industrial farmers: <https://www.lf.dk/viden-om/landbrugsproduktion/husdyr/aeg>

beaks cannot be trimmed. Organic hens live in flocks of up to 3,000 animals. The stables are required to have windows and there must be nests and chopsticks for the hens. There can only be a maximum of 6 hens per square meter, net area. In addition, at least a third of the floor area must be covered with straw, shavings, sand or peat. Each hen must at least have 4 square meters of outside space and the soil should mainly be covered by vegetation. In addition, there must be more than one field for the hens to walk around in, so that each field can be free of hens at least 60 days per year or 120 days every two years during the growing season, which makes the vegetation regrow. In the following passage, Watts (2014:395) describes the conditions of the American chickens. Danish and American conventional standards and conditions differ (mostly in size), yet I find Watts' description of the instrumental practices and logics defining modern poultry farming very descriptive, also for Denmark:

A state-of-the-art hen house holds 100,000 birds in minuscule cages stretching the length of two football fields; it resembles a late twentieth-century high-tech torture chamber. The birds are fed by robots in carefully controlled amounts every two hours around the clock. In order to reduce stress, anxiety and aggression (which increases markedly with confinement), the birds wear red contact lenses, which, for reasons that are not clear, reduce feed consumption and increase egg production. It's pretty weird.

The chickens and hens that live at Hegnsholt Farm move around in open fields covered by different vegetation. In March 2017, when I first arrived at the farm, I initially met a cock (rooster). Johanne said that I could just ask the bus driver to drop me off by the farm, which I as an urban dweller was quite impressed by. He stopped, and as I stepped onto the muddy ground, I was glad I was wearing boots. It was early spring and the sun was burning through the humid, cold mist, about to heat up the soil, in turn making it easier for the animals to rummage around to look for worms and other delicacies. The cock was busy and upon meeting him, he gazed at me with a bit of a sceptical attitude but then returned to his food and work. Before going in, I looked tow-

ards the fields and could see the chickens and hens loafing around and pecking the ground in a very focused way, sometimes taking small breaks, stretching and flapping their wings. Some walked around on their own, but there were also small groups that looked family-ish. It was clear how they were different from each other in their way of acting.

There were mother hens that kept the chicks close to them, giving them directions like 'come, here is some food', 'stay close', 'follow me', 'here is some more food, enough for everyone', 'come take a break'. There were larger portable wagons out on the fields, painted with motives of flowers and animals, and smaller portable houses with small enclosures to give the smallest chicks some protection. I could not see everything inside the small houses, but there was some stubble to nest in and some mother hens seemed concerned with arranging it. The wagons were filled with stubble and bedding where the animals could seek shelter and nest whenever they felt like, and there seemed to be a buzz in the atmosphere as they cluckingly conversed, some settling, some nesting, some hatching, some moving around, and some seeming to have a small bicker (fieldnotes, March 2017).



*Mother hen with chicks.
Screenshot from Hegnsholt's Instagram profile*

4. HUMANIMAL RELATIONS



hegnsholt • Følger

hegnsholt The little Family is taking a break during a Day of adventures. #hegnsholt #beyondorganic

36 Synes godt om
16. JULI 2016

Tilføj en kommentar ...

*Mother hen with chicks.
Screenshot from Hegnsholt's Instagram profile*



hegnsholt • Følger

hegnsholt 4 week old chickens on pasture for the first minutes of their lives. And already busy eating grass and finding juicy insects. #beyondorganics #hegnsholt

105 visninger
15. AUGUST 2016

Tilføj en kommentar ...

*Mother hen with chicks.
Screenshot from Hegnsholt's Instagram profile*

Compared to the larger automated systems, creating this living environment for the chickens and hens requires much more human labour, and is much more time-consuming. Johanne believes and feels that this way of farming is the most meaningful and best for animals living in captivity (fieldnotes, September 2017). In Johanne's experience, these living conditions – the outside environments, natural feed, growing up slowly and with their mothers – make the animals much less vulnerable to disease (Johanne, interview, March 2017). Based on Johanne's own research and experience, she believes that the sterile, closed, in-door environments are much more uncertain as many animals are placed closely together with only limited access to fresh air. She states: "When the animals are allowed to walk freely on the fields, they become more robust because they get used to the air, wind, rain, and sun, and the dirty water just boosts their immune systems and bodies" (Johanne, interview, March 2017).

While I visited Johanne in March 2017, there was an outbreak of bird flu from Germany that required all poultry farms to keep their chickens and hens inside and thousands of hens and chickens were culled around Europe. Hegnsholt had built a temporary and portable stable on a field of clover and, on this specific day, with loads of leftover plants from a nearby chili-farm. Although it was necessary due to regulations, Johanne clearly felt sad for the animals and felt that the humanimal practices at Hegnsholt were obstructed as the chickens and hens would have to be 'locked inside'. She also believed that the whole premise of how these strains of diseases are managed is wrong. Johanne explains:

I think it is a huge attack on animal welfare because they are born to roam free outside and not inside on concrete floors. In the industry, they are used to keeping animals inside and, therefore, they [the farmers] are fine with it. But I have another approach. My animals are *someone* who only eats natural foods, and we can't provide for them right now as they can't be out in the open, to eat grass and earthworms or whatever they might find. (interview, March 2017) [...] It is very stressful for the animals and I see a change in their well-being. They thrive out in the open (fieldnotes, March 2017).

Within research on animal welfare, immune systems and bacteria, there are differences in these considerations about the inside and outside, and where the contamination comes from. I will return to this more in the next chapter 'Fermenting sterile desires', but, in short, it can be stated that in large industrial productions, the hens and chickens are mainly bred to produce and their immune system is very weak. They use their main capacity on producing eggs or growing fast, and, furthermore, the genetic variety is narrow, and it is a known fact that having large numbers of animals living closely together increases vulnerability. Farmers then try to compensate for this vulnerability by using different medicines, such as antibiotics, and over time these medicines trigger unknown counterreactions from the biological systems. To understand this further, I talked to a professor from the natural sciences researching agriculture and soils, and he told me that words such as 'cocktail effects', 'unknowns' and 'unwanted substances' are used to question and study the vulnerable connections and entanglements that occur within these industrial systems (fieldnotes, January 2018).

Breeds and breeding, welfare and care

Throughout the years it has become more widespread to track down and story the production behind the food we eat, and in this relation there have been some perplexing documentaries made about the living conditions of animals within the large (huge) scale poultry industry, for instance, 'Chickens, Hugh and Tesco Too' from 2009. Stories like these reveal some unpleasant details about cheap supermarket chicken and take up the human-animal relations and welfare issues of this kind of production. While one of the motives behind these stories is to call out politicians and to make consumers more critical, it is highly questionable if these stories change people's consumption habits. Furthermore, I wish to emphasise that what makes food different from other consumables is that eating is to "simultaneously consume and produce, to destroy and enliven. Eating connects us to plants and animals, landscapes, histories, gendered politics, memories, pleasure, and pain" (Mikulak 2013:4).

Taking this into account, it seems meaningful to contest a political philosophical and sociological separation of consumers (the greedy) and citizens (the morally inclined) and the theoretical tension between a citizen and a consumer as Mol (2009) does. Mol suggests that a consumer-citizen exists and is able to mutually enjoy and appreciate 'good taste' and 'doing good': "If a consumer was not a greedy buyer, but someone with a well-developed taste, then a citizen would no longer need to silence her body but might instead learn to listen to it. The consumer-citizen that thus emerges is not in tension. Its singular normative style is modelled on that of the eater" (Mol 2009:278). Essential to the argument is that 'good taste' and 'doing good' do not come naturally, but are learned through tasting (practice) and in relation (to others and other things) – eating ethically is a not a logical argument as in 'if we know, we will act thereby', but rather a question of the relations between attention, care and belonging. In chapter 7 'Tasting landscapes', I will go further into the transformative gestures of taste and pleasure, between tables and farms, but for now, Mol's consumer-citizen leads me back to the documentaries mentioned earlier, because learning to appreciate and become sensitive to what goes on in the world and what is behind and after the food we eat:

depends on 'table companions'. It involves talking, stories, and memorable lessons. [...] In politics as in eating, good taste depends on variously shared practices of daily life. The newspaper, the television, the internet, airplanes: they all play a role in it. Even buying Fair Trade chocolate sprinkles may help, for encountering them on your breakfast table day by day is likely to further infuse you with the values they incorporate (Mol 2009:278).

Storied food might hold links to a decrease in the consumption of 'caged eggs' in Denmark. According to Danish statistics from the third quarter of 2017, the production of 'cage eggs' fell 30 percent in just one year.⁹ In the Autumn of 2017, the 'cage eggs' represented a smaller proportion than both scraped and organic eggs, but

9) Statistics Denmark <https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=24602> (Revisited Dec. 10th, 2018)

only six months earlier the eggs had accounted for the largest share. The change is mainly due to the fact that several retailers do not want sell ‘cage eggs’, presumably due to consumer mindset and behaviour, and consequently, some producers have converted their production. In the third quarter of 2017, the production of the different types of eggs was respectively: 35% for scrape eggs, 29% for organic eggs, 26% cage eggs, and 10% for eggs from free-range hens.¹⁰

Looking into recent Danish statistics on the consumption of eggs and chicken meat, there seems to be an increase due to an increase in vegetarian diets (using eggs as a source of protein) and the understanding that chicken meat is more environmentally friendly compared to beef or pork.¹¹ In relation to breeds, only a few poultry breeds out of hundreds are used for egg production; the breed called White Italians are used for white-shelled eggs and the breed Rhode Island Red is used for brown-shelled eggs (Jensen 2013). Furthermore, new breeds are continuously being developed to meet the highly technological system’s questions of animal welfare, and breeding, therefore, includes manipulating chickens to adapt ‘socially’ to conditions. At Hegnsholt, the eggs come from different modern and heritage breeds – among others, Danish landrace, Barnevelder, Easteregger, Italians, and Marans. The eggs vary in colour, taste, size of yolk, and structure of egg white and Hegnsholt has chosen different breeds according to these different eggs and in value of diversity (fieldnotes, February 2018). In relation to the industrial production of chickens and egg-laying hens, it is further noted that breeding is concentrated in “large international breeding companies that, through a network of breeding sites, propagate the breeding material to the producers. Since the breeding work, in particular, is aimed at improving ovulation, egg quality, feed efficiency and vitality,

10) Statistics Denmark: <https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=24602>
Revisited Dec. 10th, 2018)

11) This is an assumption made from looking into statistics from the Danish Agriculture and Food Council, The Danish Veterinary and Food Administration and Statistics Denmark.

both types are removed from the racing standard description, which primarily deals with the exteriors” (Jensen 2013, own translation).



The diversity of eggs coming from the hens at Hegnsholt. Screenshot of Hegnsholt's Instagram profile.

The picture above shows the diversity of eggs coming from Hegnsholt Farm, and Johanne's considerations about breeding and breeds are rather different from the conventional, industrial logics (#biodiversity rocks). The eggs of different sizes, colours and dots are carefully and simply laid-out on a wooden table and could bring associations to 'authentic' pastoralism, simple life, and something more 'natural'. I was not familiar with 'green eggs' or breeding, and my knowledge about breeds was almost non-existent at the time Johanne mentioned breeds. We were talking about her aspirations with the farm and she explained:

So the next step is on the animal side. Well, currently we have some old breeds of pigs, and sheep too, and some of the hens are of old

breeds, but there are also some industrial breeds, and it seems like those are the ones that everyone has. They lay many eggs, but we are currently phasing them out to only have old breeds. [...] We have some landrace hens, they lay an egg perhaps once a day to every third day. But I really want to convince the restaurants that we should phase out the industrial breeds, and yes, it will make the eggs more expensive, but they will taste better, and it makes sense on all different levels. So this is the next step; getting them to accept these eggs [from old breeds] and maybe inspire others to also use old and diverse breeds.

In relation to the industrial breeds, a 'cage hen' lays eggs for around 13 months, after which it is exposed (slaughtered or sold). The chicken lays about 335 eggs, i.e. 6 eggs a week. A hen in a cage consumes approx. 43 kg of feed during the laying period. An egg laying hen lays eggs for around a year after which it is exposed (slaughtered or sold). The barned hen lays about 274 eggs corresponding to 5 eggs a week. A free-range hen lays as many eggs as a barned hen and for the same length of time.¹² In the supermarkets, the caged and barned eggs cost approx. 0.2-0.25 euro, while organic and free-range eggs cost approx. 0.4-0.5 euros. The eggs from Hegnsholt cost between 0.5-1.3 euro and can be purchased by restaurants and eateries by delivery and by individuals at the 'stable door' (fieldnotes, August 2018). A whole chicken from Hegnsholt is sold to the restaurants for approx. 14€/kg and to individuals for approx. 22€/kg. Supermarket prices vary from chain to chain, but on the Danish retail company Coop's webshop¹³, I found two whole barned chickens - one at 4,88€/kg and the other at 7,5€/kg, a whole free-range chicken at 11,5€/kg and a whole organic chicken at 16,25€/kg.¹⁴

.....
12) This information is collected from the Danish Agriculture and Food Council, which is a lobby organisation that mainly represents the interests of industrial farmers: <https://www.lf.dk/viden-om/landbrugsproduktion/husdyr/aeg>.

13) Coop is a Danish retail company with a market share of 38% and has roots in the Danish co-op movement. There are approx. 1,200 independent consumer co-operatives spread across Denmark. Kvickly, SuperBrugsen, Dagli'Brugsen, Irma, and Fakta are the different chains of supermarkets under the Coop umbrella.

14) These prices were collected from Coop's webshop on December 8th, 2018: <https://mad.coop.dk/soeg#!?term=kyllinger%20hele>

Hegnsholt's eggs are more expensive, and Johanne explains:

Johanne: Yes, we are accustomed to eggs not costing anything. Even an organic egg, I mean for only three kroner [0.4 euro] you get a totally pure product, a product rich in protein. That is really cheap protein! So, what I imagine is to see a similar development as we have seen for instance with coffee – that we start seeing and experiencing the qualities of them, and that the restaurants also start seeing the quality of diversity. That an egg is not just an egg, something you buy in a bottle. [...] We have different breeds and they cost differently according to that, and some of them [the restaurants] have special courses that are alternatives to meat and that need special eggs.

Emmy: So, if you are making a poached egg, it would be the egg for 1.5 euro and if you are baking it would be the one for 0.5 euro?

Johanne: Yes exactly – we need to take into account that they vary in quality and use. I have made an agreement with the restaurant Amass that they will receive all our landrace-eggs and have committed to this. And this is actually what I dream of doing with the others, so they get a sense of ownership and feel committed to the project.

Johanne's expression 'eggs are not just eggs, and chickens not just chickens' is about adding knowledge, information and affection to the anonymous eggs and chicken breasts in the supermarket counter. This is not to re-market those fillets, but for the consumers to think about the meal differently, to connect humans and animals, and to show that the life of chickens and hens matter; it is about getting a bit closer to the worlds that feed us. Looking into the previously mentioned industrial methods for breeding, the 'growing' time or the automotive cages is a kind of profitable efficiency logic that defines the development of how many more eggs and chickens "we" can make. "Our era of human destruction has trained our eyes only on the immediate promises of power and profits" (Gan et al. 2017:2), and from that perspective, Hegnsholt's humanimal practices can be viewed as naïve, romantic and superfluous, and this is also related to Johanne's rationalisations and emotions around 'locking up' the chickens and hens during the bird flu outbreak. Also, a narrative (not story) flourishes that it is the

food *industry* that makes food affordable and accessible to the wider population, and in that narrative, Hegnsholt's eggs and chickens becomes luxury commodities as they are more expensive. The narrative can be questioned, and it will be throughout the following chapters, as the industrial methods are not only unsustainable in ecological and environmental matters, but also in relation to economy and social issues of inequality and worker's rights (Nielsen 2016; Shiva 2016). A Danish historian with significant knowledge about the history of agriculture, Dr. Phil Thorkild Kjærgaard, describes the development as follows:

I have the most dystopic perceptions of today's agriculture. In 30 years, there might not even be any agriculture left, only an ecologically devastated wasteland. There has been massive critique of the current agriculture, but it has not been listened to. Now, agriculture is in a situation of bottomless difficulties and has only a little social and political support. It has not been this bad for 200 years. (in Nielsen 2016:23, own translation)

While Hegnsholt's produce is more expensive and luxurious, I believe that the transformative gestures of their practices of food production shall not just be neglected. Indeed, the food is accessible for the rather economically and culturally privileged, and as presented in the introduction, it is also this group of consumer-citizens that has the resources to help rethink what makes a 'good' meal, enhance other storied pleasures and desires, and increase the attention to the social, economic and ecological vulnerability, injustice and unsustainability of current food production. For a greater transformation of food production, one cannot only place the response-abilities among consumer-citizens but has to involve larger political and structural transformation. In the chapter 'Tasting landscapes', I will take up these discussions again and attempt to present some response-abilities of consumer-citizens - abilities that I, alongside Gibson-Graham (2006), believe might curtail the anti-capitalist imagination.

The industrial methods are penetrated by a logic of profit and efficiency and debating animal welfare within those logics seem to become a

question of how much hurt or pain the chickens and hens can bear, how the mechanism can be performed and under which conditions. The animal practices become standardised to conscious, normal exercises and practices, although the animals might be medicated with antibiotics, and a kind of psychopharmaceutic to lower innate behaviour, and, as mentioned, these practices hold several unknowns about how biologies and ecologies respond back. Hegnsholt's practices of care in terms of the humanimal is another way of working with biologies and ecologies, and pausing the 'care' for a while is not to neglect important ethical debates about how much *hurt* or *pain* animals, vegetation or soil can bear within animal ethics (Coff 2016, as an overview). Pausing the *care*, adding care into our Carrier Bag, is addressing a question that comes before we industrially ask how much the (ecological) system can bear.

Essential care practices at Hegnsholt are feeding the livestock food waste, 'letting chickens grow up with their mothers', the design of the environments (inside and outside), and varieties of breeds. This is also what currently makes Hegnsholt's produce high-end and different from other products on the market, and this might immediately bring an ethical tension between consumerism and altruism. As with my discussion between consumers and citizens, inspired by Mol (2009), this also opens up the conversations and tensions of how money is earned and used. Johanne hopes that Hegnsholt's practices will inspire others to do the same (economically and environmentally), and Tina argues for 'horizontal scaling'. This is not about having one or two businesses scaling up and monopolising, but to create and build up many businesses, organisations or partnerships working towards a better and fairer world, questioning how to profit and what to use a potential though rare surplus on (fieldnotes, September 2016). The tensions between scales, sizes, outreach, companies, profits, consumption, care and welfare will stay in the carrier bag of this study.

Why should we care how much space the chickens have, what they eat, their well-being or whether the chickens grow so fast that their legs break or how medicated they are? The potential and manifold

of answers that these questions can have depend on the different knowledge paradigms' interpretations of care, hurt and pain. I am not seeking to reject that pain is part of living life for everyone in the biosphere. Along Scott's (2017) discussion about domestication, it is tempting to question how the intense domestication of chickens, such as broilers and caged chickens, have affected humans biologically, socially and psychologically. How has this "invention" domesticated human beings and social life? While I am not yet able to answer these questions, they are questions that seem too important to leave out of the discussion and further study. I am not trying to be regressive, nor suggesting life in the "old days" to be more desirable. The negative consequences of the current ways of growing, producing, moving and consuming food are devastating for the whole biosphere, including to human health where lifestyle-related diseases are increasing. Therefore, with regards to the concept '*domesticates*', it seems like these industrially manufactured chickens (among others), the products they turn into, and the lifestyles that ready-made foods propel affect and domesticate human well-being, changing bodies, minds and cultures.

I have moved the Carrier Bag across different histories, time-zones and scales, and while Hegnsholt's practices are particular, they are part of a global movement that is trying to respond to industrial practices of agriculture that have several ecologically destructive consequences. It is an industrial logic that is not only Danish but that globally moves food and waste over thousands of miles. My attempt at writing about the conditions of chickens in modern industrial poultry farming (cages, barned, organic and free-range) and placing Hegnsholt practices along these different practices, is not an attempt of comparison, but rather to explore the response-able, reparative and transformative aspects of its human-animal practices. There are conflicting views on care and animal welfare, and throughout the fieldwork of this study, it has become clear that the practices of Hegnsholt's humanimal relations to a great extent become invalid within the structures of capitalism and the industrial and technological logics dominating farming. Within these logics, there is not much space for the kind of humanimal

relations practiced at Hegnsholt – the time, the space, and the feed are conflicting with the current logic of economic rationality that also affects legislation and administration. I investigated this, but it seemed impossible to counterargue an economic reductionist rationality with economic reductionist rationality (does it pay off economically?) because I found the practices of care at Hegnsholt to be beyond these logics and involve value-practices that are not part of industrial efficiency. The “triple bottom line” has not yet been embodied within the economic rationality that also affect Danish agricultural politics.

A carrier bag story about human-chicken relations

The section before has been a rather ‘technical’ and numb description of the modern poultry farming, and I have been questioning whether it was appropriate to place that section within the analytical stories at all. Yet, I find that particular story important because it is part of the analysis of the response-abilities that play out at Hegnsholt, and Hegnsholt’s practices are stories of reparative futures. While I have found poultry farming rather abstract and supermarket products rather anonymous, I hope that these matters have become just a little more attachable and connectable. Trying to work with an alternative foodshed will remain abstract if we have nothing to think of it with, and this is the reason why I have tried to write out the history of the domesticated chickens. This multitemporal and multispatial story about human-chicken relations make the current situation and practices changeable. Introducing the human-chicken stories made it even more vivid that there is nothing absolute or obvious about modern poultry industry. There are alternatives, and with a time-stretching perspective, these practices do not seem that alternative.

I might have rushed through a period of approximately 10,000 years of the domesticated chicken’s life in hunter-gatherer cultures, early settlements, agrarian cultures, medieval peasant society, and all the way up to the early industrialisation. But it was actually arriving at

the modern, industrial moment in the history of the domesticated chicken that was most striking. In the aftermath of the Second World War, the chicken's life conditions seemed to change quite drastically. In only 60 years, the conditions for the domesticated life of this animal seem to have changed considerably in terms of space, scale, practices, health and social relations, and words such as 'production', 'invention', 'optimisation', 'efficiency' and 'development' are introduced to the descriptions of poultry farming. Today, we find ourselves in a time where a common argument about food production is that industrial methods are required to feed the world's growing population (Anon 2018; Jensen 2016; Shiva 2016). But is this really the case? The narrative seems to dominate the political practices of food and agriculture, at least in Denmark. The industrial farming techniques of monocropping, deforestation and use of chemicals leave destructive ecological traces globally. This practice as a wide-spread consequence network, and to rethink the narrative of 'industry feeding the world' it might also be worth noticing that, according to Shiva (2016), 75% of the world's food production comes from small-scale farmers mainly using agroecological methods. Are the industrial practices noisy, resonating deep within the webs of life, and maybe not actually feeding the world's population? Could Hegnsholt's practices in this light, despite the immediate luxury, be part of a horizontal scaling of small-scale agroecological farms actually feeding the world's population?

Writing out the history of the domesticated chicken is one attempt to show that the ways in which animals are treated within the modern, industrial systems is not "naturally given" and maybe not even 'meaningful' in terms of ecology, welfare or economy. Despite the massive outreach of industrial practices in current agriculture, in terms of history, these practices have just been considered "normal" in a glimpse of time. These historical reminders help (slightly) to unlock the 'locked-in' high carbon societal tale (Urry 2011) and help slightly to open up our imagination of reparative futures. As mentioned earlier, Gibson, Rose and Fincher unfold the 'reparative' as an attitude where "we look and listen for life-giving potentialities (past and present) by charting

connections, re-mapping the familiar and opening ourselves to what can be learned from what already is happening in the world.” (Gibson et al. 2015:ii). The modern history of poultry farming tells a story of chickens and eggs condensed to natural resources to be exploited by humans within the logics of economy, but it should be mentioned that in early modern times, “‘resources’ suggested reciprocity along with regeneration” (Shiva 2009:228). As written in relation to the sharing economy about ‘idle resources’ in the previous chapter, Shiva depicts that resources used to hold another ethical human-nature relation as “the earth bestows gifts on humans who, in turn, are well advised to show diligence in order not to suffocate her generosity” (Shiva 2009:228). These thoughts on generosity, compassion and humbleness made me think of Le Guin again: “The trouble is, we’ve all let ourselves become part of the killer story, and we may get finished along it. Hence it is with a certain feeling of urgency that I seek the nature, subject, words of the other story, the untold one, the life story” (Le Guin 1986, 168).

Hegnsholt is a tiny organisation and does not really count in Danish consumption statistics, but their practices, I would argue, are part of a reparative societal organism as it tries to build an environment where chickens can thrive and live well – rise again and again. Hegnsholt is by far the only one that takes up farming like this, but there is a global movement for it. Thinking of Hegnsholt as part of a global small-scale farming movement mostly working with agro-ecological methods (Shiva 2016), Hegnsholt’s reaction becomes part of a reparative system that an organism, here society, starts when it experiences damage. And Johanne’s response to my questions about why she started Hegnsholt might reflect this: “I wanted to challenge the traditional way of farming with a mono-production of up to 20,000 hens. I wanted to explore if it was possible to build this farm without big external finance, with a manifold variety, and much more sustainability” (Johanne, interview, March 2017). To explore Hegnsholt’s practices as activist, Pink (2012:10) argues that a global-local nexus is crucial to understand “how local practices and configurations of place are implicated in wider processes of change.”

Another intriguing part about the ‘chicken and the egg’ situation is that the story continues and that in itself makes for a Carrier Bag Story (Le Guin 1986). Those stories are for moving beyond the Anthropocene; about connections, relations, and matters of care; about telling many different stories, tracking down old stories and re-telling them. As I wrote in chapter 1 and 2, the eclectic style of adding different themes, questions, concepts, and histories into a research carrier bag is an attempt to study the situated, mortal, and nature-cultural history of chickens and eggs. This style of research and writing also inspired Haraway’s ‘playing string figures’ (Haraway 1987) and her story of ‘sowing worlds’. “Sowing worlds is about opening up the story of companion species to more of its relentless diversity and urgent trouble. [...] It matters what stories we tell to tell other stories with; it matters what concepts we think to think other concepts with.” (Haraway 2016:118). There could have been one book or more written, each about chickens and eggs, but I have chosen to hold chickens and eggs together as they are empirically closely connected. Matter is not just a medium – the egg is not just a medium to become a chicken nor the chicken a medium for laying and brooding an egg, but rather “matter is a powerful, mindfully bodied word” (Haraway 2016:120). I have tried to add more to the stories of multispecies coexistence by following different strings of the human-chicken relations throughout history and different places as well as through instrumental farming logics and Hegnsholt’s practices. I will follow the stories about companionship further throughout the next pages.



Beyond commodification, chickens as companions

At a midway-conference during the Sharing City Project, Johanne was presenting Hegnsholt Farm and, in doing so, highlighted their mission statement: “At Hegnsholt, chickens grow up with their mothers” (fieldnotes, September 2016). This comment made me curious because it raised questions of compassion and care, it spoke to my unknown knowledge of the food I eat, to the involved dying (the bird) and living (me), and to the compassionate and caretaking

part of motherhood in me. Altogether I found it woke a kind response-ability within me. Despite that I did not know exactly what to think about the “chickens growing up with their mother”, it seemed to call for a different kind of response-ability compared to the consumer encounters with industrial chickens at the supermarket. Later, I asked Johanne if she could elaborate on the story of mother-hens:

I wanted to show that it was possible to make a production where the animals – well, all domesticated animals, animals living in captivity, are under stress whether they are fenced or caged - by creating an environment that was as natural as possible. Also, you do not need to gather 100,000 newly hatched chickens in stables where they walk around without a mother. I want to show that they can be together as it lowers mortality, [being with the mothers] gives the chickens more comfort and safety, and they [the mothers] can teach the chicken where to find food. (Johanne, March 2017).

Johanne reflects on the ‘domesticated’ issues of farming. I have not done a comparative study to explore the different practices of care and compassion among farmers, including at the so-called conventional farms. Care is an ambivalent terrain as there is a “persistent idea that care refers, or should refer, to a somehow wholesome or unpolluted pleasant ethical realm” (Puig de la Bellacasa 2017:7–8). For instance, the ‘care’ that Johanne wishes to express for the chickens is contested when she has to lock them inside due to the risk of bird flu, but in this case, ‘care’ is expressed by affection and tenderness while the situation simultaneously seems to bring out guilt and loathe. I am not searching for a revelation, but rather to argue that ‘to care’ and ‘to care for’, according to Bellacasa (2017), involves affection and maintenance, and that “there always seem to be an inherent positioning [ethical and political] that happens through engagements with caring” (Puig de la Bellacasa 2017:6). This positioning is clear within Johanne’s practices, choices and constant reflections and negotiations of how to ‘care for’ the chickens. She constantly gathers new information and knowledge and enhances the experiences with the different animals, and when I asked Johanne about her aspirations for the farm, she replied:

I do not believe there is an end result, it is a constant development. I would really like to set out new standards for sustainability and recircularity within agriculture. And knit together closer and closer relations with the restaurants. One could say that, in one way, new ambitions appear, and I have become more and more ambitious on these matters as my experiences and knowledge grow. It is also the way that I differentiate myself in relation to other producers. We have a whole other product than just organic eggs and chickens. It [being very ambitious with sustainability and quality] is also a way for us to keep being interesting to the restaurants.

Indeed, this is a way to position Hegnsholt's produce in the marketplace with a distinct product, but it is also about creating stronger ties between the landscapes and methods of agriculture and urbanities of eaters; creating stronger knowledge about the humanimal relations and enhancing the response-abilities of the eateries. Throughout the almost three years that I have been following Hegnsholt and Johanne, this way of handling and gathering new knowledge and experience, the good and the bad, and the constant reflections about 'what is the most sustainable' have been reoccurring subjects in our conversations. Hegnsholt's organisation has changed and redirected throughout the last two and a half years. This negotiation, maintenance, affection and humbleness can, for instance, be seen in the following Facebook update from Johanne. The update was introduced with an apology of why they had to increase the price of the eggs and followed by a short critique of organic eggs. The post was "liked" and "loved" by 215 people, shared 5 times and received 15 comments with supporting remarks:

"[...] Here at Hegnsholt, animals move around in small groups of 100-600 animals in mobile houses on the fields. It is a more time-consuming way of keeping animals. It takes extra time to transport the eggs and the feed back and forth, and to move houses and fences around. The animals eat a lot of grass and food leftovers. These contain much less proteins compared to pellets, which means that the hens at Hegnsholt lay significantly fewer eggs than other hens. But when we still think it's the right way to keep chickens, it's because the chickens enjoy grass and food waste so much, and because it produces rich eggs with a natural yellow flower (from the carotene in the grass),

and because it, in the heart, makes perfect sense, to give the animals residues and feed produced just outside the door of the chicken, rather than pellets based on imported ingredients such as South American soy, Chinese rapeseed, Indonesian palm oil and Kazakhstan wheat. And yet, I'm not at all content with how we do things today. I would like to be more ambitious – among other being able to use even more residues [food waste], improve our mobile solutions that would also be more discreet in the landscape picture, and upgrade our egg packing with electronic radioscapy. This gives greater assurance that we will not sell eggs with cracks or other defects to you. But it requires a surplus. Also, in economic turns.” (September 2nd, 2018, own translation)¹⁵

While I am trying to think of Hegnsholt's practices as reparative humanimal relations that are different from the more dual and dichotomic human-animal industrial ones, the attentive eye will probably stumble over words in quotes throughout this text, such as “*my* animals” and “produce”. I have also sensed a compassionate sensitivity in Johanne's voice and eyes when she talks about the animals, the way she holds a chicken in her arms, her careful considerations and practices when creating environments for the animals to thrive in, and ensuring foods they enjoy (fieldnotes, March, September and December 2017, April and September 2018).

This is a recurring tension of the carrier bag, unless we are able to rethink commodities and produce with more care and compassion? Although the chickens and eggs from Hegnsholt are sold as commodities, they are also trying to situate the chickens as more than objects of exchange and to situate and treat them as emotional beings, thereby trying to create an environment that the chickens can thrive in and enjoy. In addition to the Facebook update above, it has not been rare to hear Johanne express her observations about how the animals are thriving, and with her storytelling, she is trying to make us more engaged with the chickens and their eggs to value them more.

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15) <https://www.facebook.com/hegnsholtoenseri/photos/a.803780299675119/1851301054923033/?type=3&theater>

What I am trying to emphasise is the understanding of care as a situated, practical maintenance that requires affection and relations – as there is always someone or something else; care as an encounter-based collaboration. The story about how I encountered a cock at Hegnsholt is about this situated affected knowledge. Also, I have childhood experiences from my grandparents' chicken run, where I had the romantic notion of sitting and reading among them. But the chickens and I both got distracted as the chickens got sceptical of my behaviour and wanted to see if my book was edible.

In return, I got a little nervous and ended with finding them some other food. I also remember what it was like to collect the eggs, how some of the hens protected them and how I had to negotiate and collaborate to get my hands on them. Some months ago, I had to get eggs from the hens at my kids' kindergarten and had a similar experience where one of them got aggressive as I was too pushy and nervous. When I calmed down, they became more trusting. But I still felt slightly as if I was stealing, taking the egg from the mother. This is not about bamboozling anyone, but about making connections, experiencing gratitude and having some rather morally difficult face-to-face (or face-to-beak) encounters with the food we eat. It is about cultivating embodied knowledge of the livelihood of eggs and the connection to the mothers who laid them, about humble exchanges that are not always pleasant or romantic, but that makes you place the rows of supermarket eggs in a very different relation.

Weir argues that “through listening, we become drawn into a communicative relationship with the river. Through communication, we acknowledge the sentience and agency of ecology life. We extend subjectivity to place, plants, animals and rivers, and we lay the basis for love, care and ethics with non-human others” (2015:21). This kind of knowledge can encompass Johanne's situated, embodied and practical experiences and observations of the animals' well-being at Hegnsholt. Within this perspective on care (as a situated, relational practice) and the practices of Hegnsholt, questions like ‘why care?’

become obsolete and incomprehensible. Earlier, I wrote that we have become blinded by the efficiency of industrial logic, but this study shows there is much more to our capacities than devastation and selfishness. Rose argues that we are capable of bringing ourselves into a fellowship with others and involve “developing arts and ethics of multispecies conviviality” (2017:57). She adds that:

The most intimate modes of care involve orphans; the foster babies must be made to feel part of a family. They have to be fed and touched regularly. Human intentionality infuses care practice; youngsters will die without tactile, vocal, sociofamilial care. [...] So care is an ethical response involving tenderness, generosity, and compassion, and care is an ongoing assumption of responsibility in the face of continuing violence and peril (2017:57–58).

Still, I need to return to the commodification part of the chickens and hens living at Hegnsholt. According to Anna Tsing, commodification means that “within capitalist logics, things are torn from their lifeworlds to become objects of exchange” (2015:121). Throughout history, both humans and non-humans have been made into resources of investment, and this has inspired investors “to imbue both people and things with alienation, that is the ability to stand alone, as if the entanglements of life did not matter” (Tsing 2015:5). Karl Marx pointed this out by showing how workers were separated, both from each other and from the process and products of production, and in the case of Matsutake mushrooms, Tsing continues this thinking by studying how humans and non-humans are separated from their livelihoods. They and we become mobile assets that can be removed from our lifeworlds, travel thousands of miles and become exchanged with other mobile assets. I use the word ‘asset’ to put emphasis on the commodification. This thinking inspires the formation of certain types of anthropogenic landscapes of lonely assets, and in these landscapes, there is not much space for collaboration, companion species or neighbouring plants because, apart from the asset itself, everything else becomes waste, trespassers or vermin.

I am not trying to depict that everything is a harmonious collaboration when using biological and agroecological methods, but there seems to be a clear distinction in the perception of e.g. plants, soils, animals, etc., as ‘the others’ and as assets rather than companions in industrial farming methods. This is what I will write out in the following chapter in the stories about the sterile desires that prohibit feeding livestock with food waste. Also, this distinction could be exemplified with research that highlights that the free-range and organic animal’s welfare is worse, because they are exposed to parasites and infections to a greater extent, can be eaten by foxes, martens or ravens, and cannot be treated with the same medicaments, resulting in more experienced suffering and pain for the animals (Palmer and Sandøe 2018). I mention this point of view on animal welfare, not to try to strive for objectivity, but to depict the different views, values and practices of human-animal relations.

Within Hegnsholt’s practices – as thinking and doing – is the conflict and constant negotiation of doing the “right” or “best” thing for the animals and the environment, a kind of constant negotiation that constantly comes with new information. However stressful, it creates a constant situation of adjustment and reflection (Beck 1992; Virilio 2012). While I have experienced Johanne as quite steady, though curious and humble, in her beliefs and visions, I remember the feeling of slight resignation that I myself experienced when Johanne in March 2017 criticised organic certificated food of being non-sustainable as well as industrialised. I thought ‘Oh no, stop, I had just decided that organic food was better than conventional’. I told her that and asked her to explain:

Well, one can say that a fantastic job has been done when it comes to explaining to the public what organic is, and that means that there is one common story of what the red label¹⁶ is. And I think that it is time to challenge that story a bit and move forward because there are definitely challenges with sustainability and animal welfare. To me,

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16) The Danish label for state-controlled and certified organic food is a red ‘Ø’ that stands for økologi, which is the Danish word for ‘organic’. The EU regulations on organic food form the legal basis of for the production and distribution of organic food in Denmark and the rest of the EU. The regulations lay out detailed rules for the production, processing, import, labelling and marketing of organic food.

the residual products and to be able to recirculate are more important than the organic certificate. I have even considered that, if it was needed, I would give up the certificate to be able to recirculate more, as some of the residuals that we can receive are not organic. To me, the certificate has become more of an industrial label, an industrial standard and an industrial product, and I feel that what we do here is very different from that. In that sense, the certificate does not matter much to me. It is very important that animals are kept responsibly and treated well and that we don't spread poisons out on the fields, but to me, it does not have to do with the [organic] label. (interview, March 2017).

To me, the story completely changed with this insight. Rather than discussing organic or not in terms of reparative futures and response-abilities, it becomes questions of methods, practices, scales, size, seasons, the traces the practices leave in the landscapes, and the trust between the farmers and consumers. Tina has a different view on certificates as she believes they display a sense of security and certainty, and a story that does not need to be told every time a customer wants to buy it. Also, she mentions that it is a costly, lengthy and bureaucratic process, especially for small producers and one man businesses, but one that also helps small local producers to story and ensure their produce (interview, November 2017). While Tina speaks of some of the advantages of the organic certificate in relation to small, local producers, she also questions the global movements of organic food and the industrial production methods (fieldnotes, June 2018). These could be organic avocado from Israel or Chile, organic quinoa from Bolivia, organic bananas of the Dominican Republic or organic haricots verts from Kenya, which production and export/import all have social, economic and environmental implications.



The earlier story of the modern poultry production, organic or not, also reflects some of these issues. Furthermore, intensely processed and prefabricated foods are being certified organic, which contests the original anti-capitalist and sustainable ambitions of the organic movement. Danish consumers are among those who buy the

most certified organic food and bring the organic share of total food sales in retail to 13.3 percent¹⁷. This is told as a success story and I am bringing this forward as both Johanne and Tina discussed the certificate and its conditions. Also Mikulak (2013:45) depicts that:

The popularity of organics is a market success story, but represents a failure of the system to accommodate radical change, and as such, can be read as a cautionary tale of how green capitalism and environmental economics can easily merge into various hegemonic configurations of ecological modernization.

This is, amongst other things, also in line with Johanne's thoughts on the 'hinterlands' of the organic certificates. Hegnsholt has also experienced the bureaucratic difficulties that Tina mentions, and at a point, Johanne was required to send in the recipes of the bread from Bæst, even though the restaurant has a gold organic eatery certificate (90-100% organic). Johanne is not the only one with the views presented above, also Mikulak (2013), who researched local food movements and community supported agriculture (CSA), depicts how many growers have chosen to eschew organic certification due to the cost and process, and instead work intensely to create trustful relationships directly with consumers. I find this similar to how Johanne is trying to make the restaurateurs more involved in the farm and more response-able through collaboration.

Mikulak also writes how, "Like many others, Barbara Kingsolver points out that "certified organic does not necessarily mean sustainably grown, worker friendly, fuel efficient, cruelty-free, or any other virtue a consumer may wish for" (Mikulak 2013:148). In industrial logic - organic or not - when an asset can no longer be produced in a place due to extinction, the places are left abandoned, and the investors continue their search for new places to produce the assets. "Alienation produces ruins, spaces of abandonment for asset production" (Tsing 2015:5), and

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 17) Based on Statistics Denmark: <https://okologi.dk/newsroom/2018/05/histo-risk-stor-vaekst-i-oeko-salget> (Revisited December 8th, 2018)

yet, according to Tsing, this is too simple of an understanding, because once the investors have left and the so-called abandoned places are left by themselves, new multispecies and multicultural lives seem to emerge despite the declared death of those particular spaces. What Tsing does is to look for life in these ruined landscapes, and in the case of this research, the ruins are spread out over the industrial landscapes of industrial poultry farming and egg production. It is the chickens, the eggs and the food waste that does not fit the industrial logic and legislation. Based on the observations of humanimal relations at Hegnsholt Farm and the earlier mentioned hunter-gatherer's perceptions of humanimal companionship, I suggest thinking of the chickens at Hegnsholt as collaborators and companions rather than simple commodities.

I do not mean to anthromorphise the chickens or hens, but to stress how humans and non-humans are constantly collaborating, making and affecting each other (Ejrnæs 2015; Scott 2017; Shiva 2016; Tsing et al. 2017). For instance, "thanks to their gut bacteria, they [e.g. pigs, cattle or chickens] can digest plants that we cannot find and/or break down and can bring them back to us, as it were, in their "cooked" form as fat and protein, which we both crave and can digest" (Scott 2017:18). Moreover, with regards to the animal-animal relations at Hegnsholt, Johanne has wished that her chickens and hens could walk around free among the sheep and pigs. This would help reduce fleas and rats as the chickens eat fleas and scare off rats. These are not just innocent collaborations as they wish to diminish space for some species with other species, using ecological methods rather than chemical ones. This also resembles how we cut down brambles to give space to other varieties and species, and this is a kind of human control of the invasiveness of the brambles. Furthermore, according to Tsing, the more-than-human relationality and collaboration is about realising that:

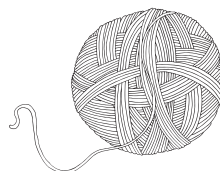
making worlds is not limited to humans. We know that beavers reshape streams as they make dams, canals, and lodges; in fact, all organisms make ecological living spaces, altering earth, air, and water. Without the ability to make workable living arrangements, species would die out. In the process, each organism changes everyone's world (2015:22).

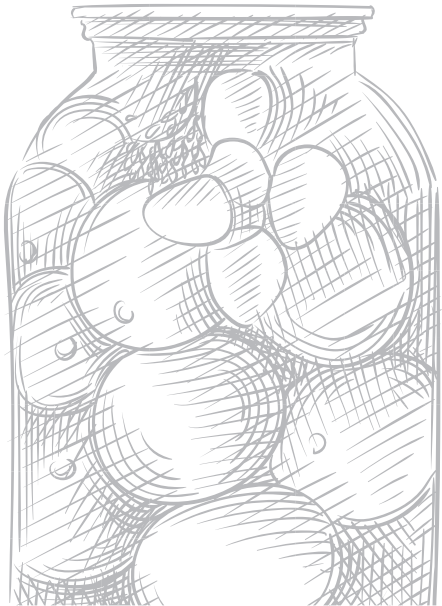
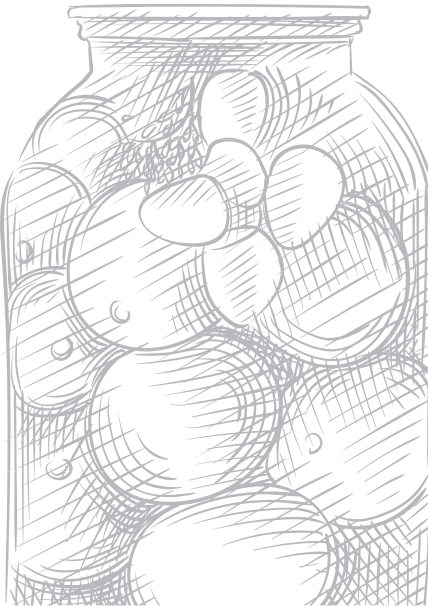
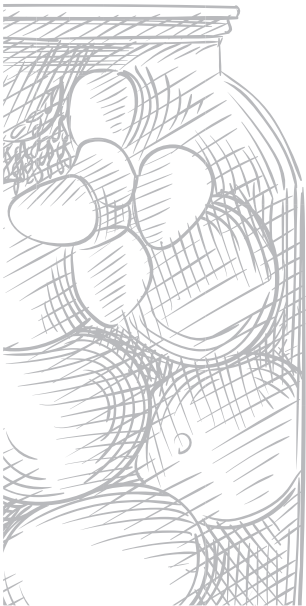
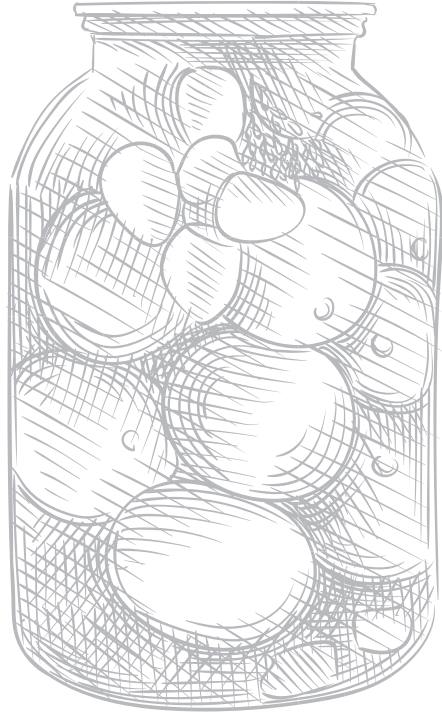
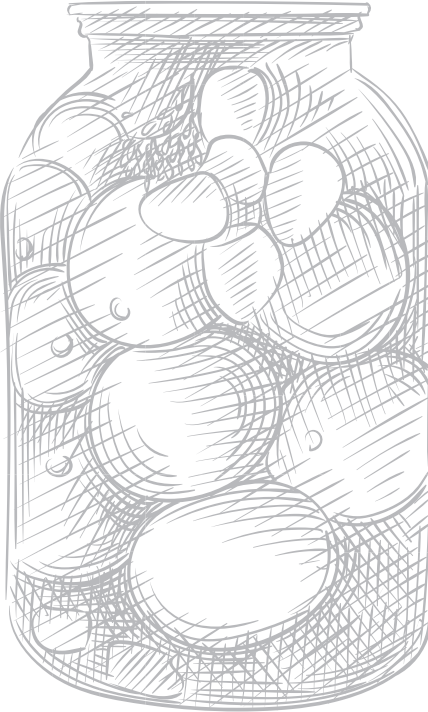
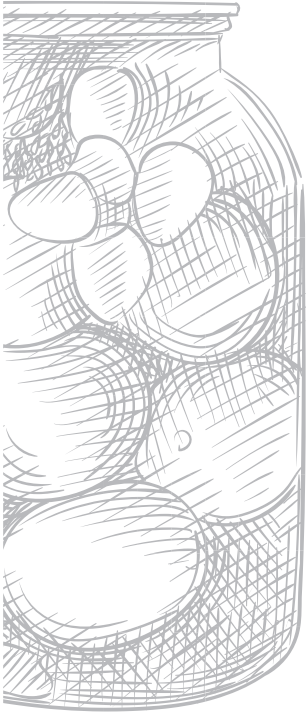
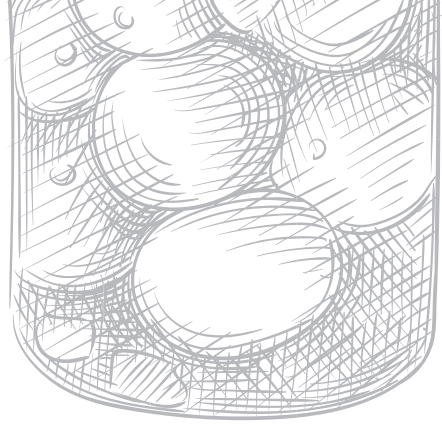
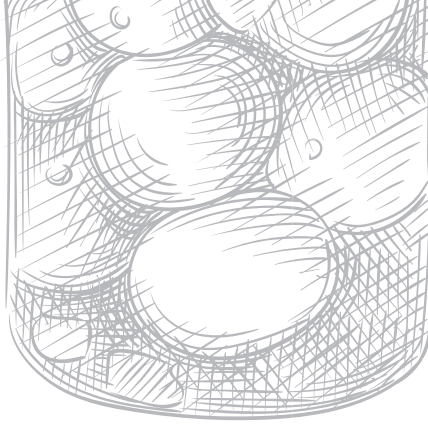
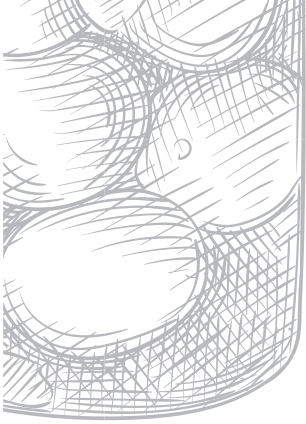
To stay in ruins is also a critique of the modernist logic of constant progress and efficiency apparent in the descriptions of the modern Danish poultry farming. “Progress is a forward march, drawing other kinds of time into its rhythms. Without that driving beat, we might notice other temporal patterns” (Tsing 2015:21). *Progress* has also brought along ‘progressive thinking’ and is embedded in the single story of what it means to be human (by intention and development) (Le Guin 1986). But the problem is that “progress stopped making sense. [...] It is in this dilemma that new tools for noticing seem so important.” (Tsing 2015:25). The noticing that Tsing proposes is a kind of thinking that involves ethnographic methods of careful observations and how ‘the startle of surprise’ disturbs common notions, which then allow us to see something new, and a kind of natural history telling where your attention is following interplaying lines of stories of different projects (Haraway 2016; Tsing 2015:293). Looking into the ruins, it is not about excusing or easing the destructive forces of capitalist logic, but to show that there is much more to the world than capitalist logic, and this thesis is my attempt to contribute to the theories of relations and heterogeneity of space and time (Gibson-Graham 2014; Massey 2005; Mies and Shiva 2014; Tsing 2015; Tsing et al. 2017). This is what I have been trying to do by presenting the humanimal practices, ecological circularity, unknowns about how biology will respond to medicines and feed, and questions of domestication at Hegnsholt. In the following chapter, I will also address contamination and bacteria mutation and in this sense also show the kind of worlds multispecies can make.

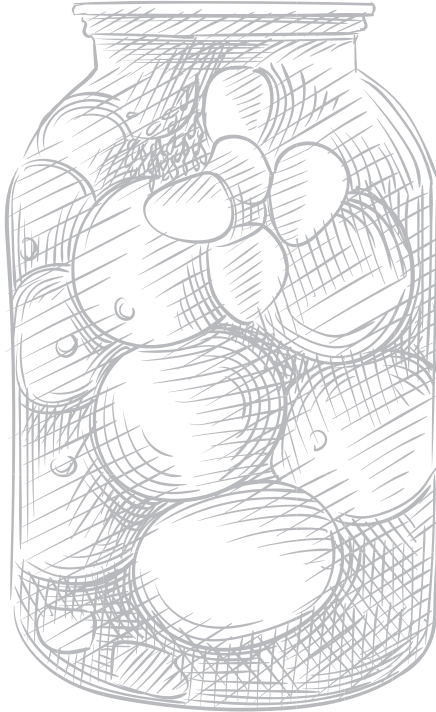
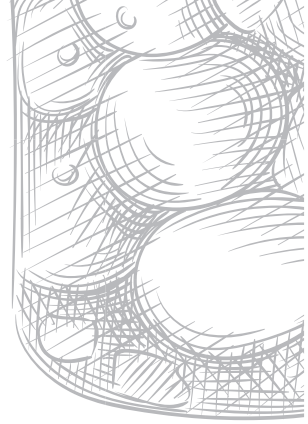
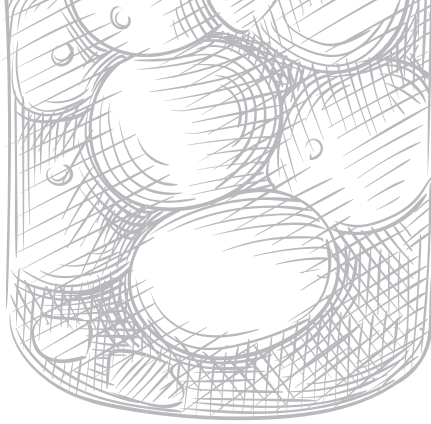
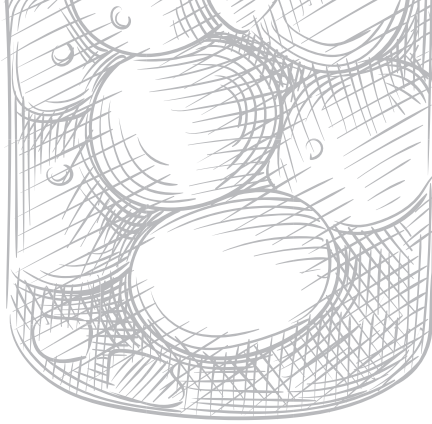
It may be clear that I am trying to move beyond the single story of the chickens and eggs as commodities, and I want to emphasise that I am not trying to anthromorphise the animals through Johannes experiences and my own observations and experiences of their livelihood. I do not know what the chickens think or feel and I am humble and my language immature in relation to this as I have just started observing chickens and hens more carefully. However, Johanne lives with chickens and hens every day, and throughout the quotes and notes, I hope to have given an impression of how she experiences their chan-

ge of behaviours. Observing chicken practices and behaviours give a sense of their well-being and it is a knowledge that comes from learning to notice, building relations and embodied experience. I suggest we direct our attention to more-than-human matters and processes, to ecologies, and cultivate our observations of the affective relations between humans and animals. I believe that this is the knowledge reparative humanimal practices require. In line with this way of thinking, Le Guin writes that “look where objectifying has taken us. To subjectify is not necessarily to co-opt, colonise, exploit. Rather, it may involve a great reach outwards of the mind and imagination” (Le Guin 2017:16). Throughout the research project, I have found it difficult not to fall into vitalism, romanticism or animism, as it seems scientifically dangerous in modern times. While being attracted to the thoughts, I have tried to be very focused on the practical, affective and sensuous collaborations and communications that feed us and explore how the matters and processes have changed and moved through history and landscapes.

I have tried to be attentive to studying how different biosocial spheres react on one another, and while I must admit that I have encountered animist ideas of animals and plant communication (in relation to ethical debates of our relations) with hopeful curiosity, scepticism and abstention. The latter in fear of vitalism and animation, which must be grounded in the modernist ideas of alienation and objectification (Le Guin 2017; Weston 2017) and probably also some suspicion because it gave me associations of New Age cults. Taking this suspicion into reflection made me question what makes this kind of companion-species thinking seem so terrifying. These matters and their processes are vital to our existence and resituating ourselves within these ecological cycles should not be frightening nor religious. From the empirical materials, I am suggesting that this is the kind of thinking and practice we need to live *beyond* the so-called Anthropocene and that it might be a speculative task to work with mattering, matters and what matters, and what makes life live.

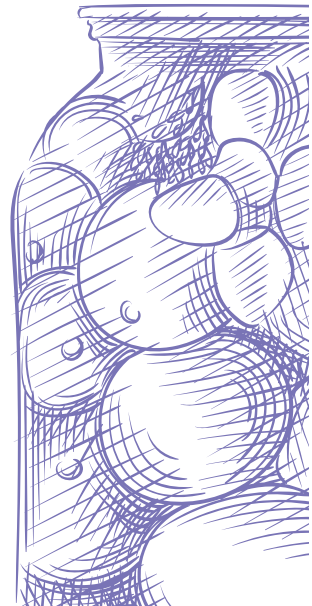
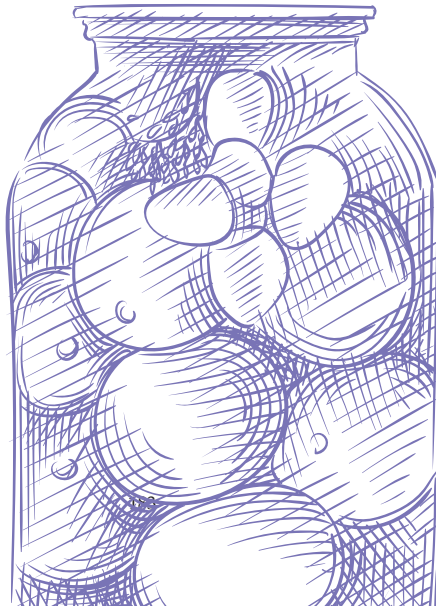
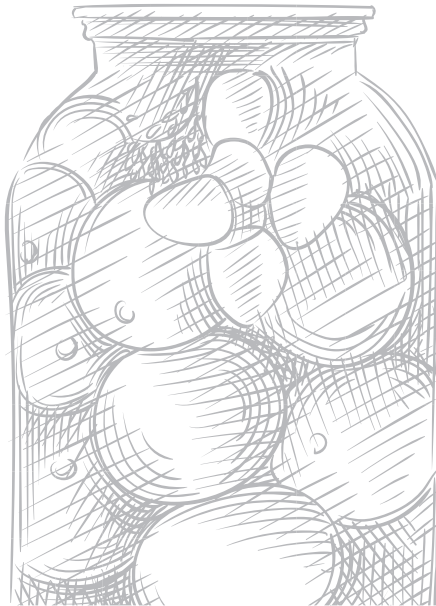


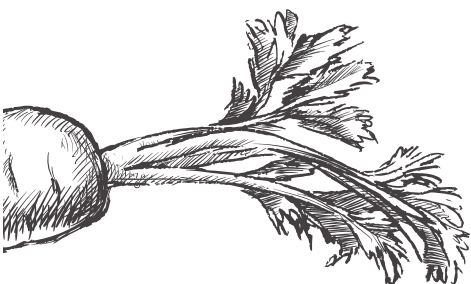




5. Fermenting sterile desires¹

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1) Some sentences in this chapter might appear in published form in 'A Carrier Bag Story about (waste) food, hens and the sharing economy' (Fjalland 2018a).





The previous chapter discussed the humanimal relations practiced at Hegnsholt Farm, and one essential practice among these is feeding livestock food waste. Hegnsholt's eggs and chickens are considered to be of exceptionally high quality as they are bought by acknowledged and award-winning restaurants and eateries in Copenhagen, such as Bæst, Mirabelle, and Manfreds¹, just to name a few². The exclusivity might create some tensions to questions of how to feed the wider population, but I believe that the exclusivity also brings some momentum for the transformative gestures of feeding livestock food waste because of the 'quality' and 'pleasures' that the 'exclusivity' stories and embodies. I addressed this tension in the previous chapter and it will be addressed again in the next chapter. Hegnsholt had/has an exchange agreement with several restaurants and eateries in Copenhagen: they give their food waste to Johanne as she

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1) The delivery of eggs to Manfreds (restaurant), Bæst (eatery focused on pizza and pasta) and Mirabelle (bakery and eatery next to Bæst) stopped in the spring of 2018, and these three places are now mainly self-sufficient from their own farm, Farm of Ideas, also located in Lejre. If they are short of produce, Hegnsholt still supplies eggs and still delivers chickens. The three restaurants and the farm are all owned by the chef and restaurateur Christian F. Puglisi, and I highlight this partner in the exchange program as Puglisi has played an important role in shedding light on the conflicts of sharing food waste. Puglisi also owns the Michelin-star restaurant Relæ, the first of the four, and is the former sous-chef at Noma, putting him in a position where authorities listen (at least a bit).

2) The number of restaurants that purchase Hegnsholt eggs and chickens has varied over the time of this research project. Some of the restaurants do not give their "food waste" to Hegnsholt.

delivers eggs and chickens, who in turn takes it back to use as feed for the animals. I write 'had/has' because the food authorities often terminate agreements due to theoretical risks of disease outbreaks.

When there are speculations of reopening an exchange agreement from the authority's part, it is under circumstances of great uncertainty for the farmer and restaurateurs because of unclear regulatory interpretations of *what* can be exchanged, *where* and *how*. These negotiations and their associated debates in public media and policy stories are what I have decided to call 'sterile desires', and seem to drive the regulatory authorities in their quest to cleanse food environments of their theoretical risk and harm to consumers, animals, and export. With this chapter, I wish to explore the response-abilities that have emerged from the thinking and doings of Hegnsholt Farm and the action group. Moreover, I add to this and continue to add to the humanimal collaboration of making worlds. In this chapter's focus on the (rebellious) food waste, feed materials and thinking of bacterial movements and contamination, I seek to contribute to knowledge about human and nonhumans entanglements and matters of matter and movements. It is my attempt to contribute to a bigger story about reparative futures. First, I will go through different discussions about feeding livestock, then explore the closure and different responses from Johanne, myself and the action group. I will discuss how to respond to the ideas about a theoretical risk of contamination, and, finally, try to ferment the 'sterile desires'.

What has become clear from the process of the closure and the different responses (human and non-human) is the (another) clash of rationalities. To *not only present* the clash of stories, but also work with them, I have found some practical and theoretical inspiration in the arts of fermentation. 'Fermenting' and 'sterile' are two practices of working with bacteria. Fermentation is a microbiological process that is constantly happening around us, whether we want it to or not, because it is the ecological world's main process for transforming organic material (composting). Food fermentation covers a vast array of practices and processes that animate wild microbial organis-

ms and has been used in almost every culture since Ancient times. Fermentation preserves foods for storage and it is used to cultivate significant cultures and experiences of taste. It is a creative space between fresh and rotten, the culmination of time, place and culture, a meeting and relationality between humans, plants, microbes and atmospheric elements (Fournier 2017; Katz 2011, 2012; Mikulak 2013; Peterson, Ejlersen, and Ingemann 2015). Katz also suggests that ‘fermentation’ also applies to thought, as “ideas ferment, as they spread and mutate and inspire movements for change” (Katz 2011:56).

In this chapter, I suggest that fermentation as a collaboration between bacterial and human matter is essential to developing response-abilities and reparative futures and that this process involves the fermentation of our thoughts and stories for change. Therefore, in questioning what is preserved, cultivated, and what is deemed unhealthy or unsterile, I seek to explore the kind of imaginaries that might emerge through the fermentation of the regarded sterile desires and the food waste practices and stories of Hegnsholt Farm, materially, bodily and culturally. I will do this by describing and discussing food waste as feed, the different arguments for closing down the exchange relation and the involved parties’ different responses to the closure. This contributes with some practical perspectives on response-abilities that are particular and situated, but also generic as they relate with responses to environmental change. To this knowledge, I add and discuss the stories of theoretical risks, ideas of contamination, the wild and the sterile, the unruly, and mutating worlds. I am doing this with the particular context and historical, material, and cultural-analytical work of more-than-human relations. The chapter draws on material from interviews with Johanne from Hegnsholt and Tina from Lejre Municipality, fieldnotes from the interactive research with Hegnsholt Farm and the action group, Facebook and Instagram posts by Hegnsholt, an official ministerial letter that settles the arguments for the closure, and different public news articles and interviews.

Feeding livestock food waste

In this section, I will describe the different reasons for Johanne and Hegnsholt's decision/strategy to use leftovers from restaurants, supermarkets, grocery stores, and other nearby farms³ as animal feed. The exchange agreement with the restaurants has been terminated and this chapter traces the responses to this because both the closure and the ideas for using food waste as feed portrays different human-nature perceptions. Furthermore, the exchange agreement itself tells us something about response-able urban-rural relations and the transformative gestures of the carrier bag of food, waste, fields and gastro-nomy. According to Hegnsholt, the leftovers achieve a renewed value as feed to Hegnsholt's hens as Johanne believes that animals should be fed natural and fresh feed, to minimize food waste on environmental reasons, and for reasons of eating experience and taste. According to Hegnsholt, 'natural and fresh' means resources that, for instance, come from fresh vegetables (such as cut-offs from leeks or carrots), old bread, and the living environment (such as earthworms, grass and clover), and is opposed to artificially prefabricated pellet feed. Essential to the debate and legislative definitions are the interpretations of the material itself; Hegnsholt defines the restaurant leftovers as residual products or byproducts, as they are sorted in the restaurant scullery and the bread is untouched. The Danish Food and Veterinary Administration defines the leftovers as waste and can therefore not be used as feed. I have chosen to title this section as "food waste" because the leftovers are considered to be 'waste' and this is where the tension occurs, and because it is 'food' from restaurants that is turned into feed. I have placed a picture from Hegnsholt's Instagram profile below where chickens are eating 'food waste' from one of the Copenhagen eateries. Waste can immediately bring out a sense of disgust, yet this picture presents the food waste in another sense. With the caption and hashtags, Hegnsholt seeks to present how the chickens enjoy the fresh (e.g. the red Romanesco leaves) food, they are happy, and the perspe-

3) The number of partners in the exchange has varied over the research period. In February 2018, Johanne had agreements with 14 places. On occasion, Johanne also received leftover meals and processed food from.

ctive makes it look like they have almost plunged into the food with enthusiasm. The use of colour tones and slight distance (opposed to a close-up) might make the food waste appears a bit more appetising.



*Menu of the day based on deliveries from Restaurant Amass.
Screenshot of Hegnsholt Instagram profile*

Every Tuesday, Johanne fills up her van with eggs and chickens and drives to Copenhagen to deliver them to various restaurants and eateries. As Johanne empties the van of produce, she fills it up with buckets full of residual products, in return leaving empty buckets at the restaurants. The buckets currently hold 60 litres but she is trying to find bigger ones (70-140 litres). The problem with big buckets is that they are sealed so tight that the food gets rotten, and the chickens do not enjoy this. Throughout the week, the kitchen sorts the cut-offs. Due to strict kitchen hygiene rules for restaurants, a spatial disintegration and timely postponement between where and when vegetables and animal produce can be handled is enforced. Usually, the vegetables are all cleaned, cut and packed in the morning, so they are ready for service later. This is usually when and where

the residual products for Hegnsholt are sorted. Without having been cut or touched, bread that is considered too dry for restaurant customers and that can't be used for 'bread crumble' is packed in bags.

When we⁴ gathered for a meeting in December 2017 to discuss how to address the theoretical risk, Christian Puglisi (chef and restaurateur) explained the kitchen routines in relation to the process of sorting, and we briefly discussed the high protocols of self-regulation of restaurant kitchens in Denmark. In an interview with the Danish newspaper *Politiken*, Puglisi explains that "the vegetables are cleaned and prepared in a separate scullery and are never in contact with meat or other sources of infection. There is nothing 'wrong' with the bread from Mirabelle when it's three days old and becomes chicken feed" (Dahlager 2017a).

Hegnsholt participated in the Sharing City Project specifically in relation to the exchange agreement because it was about sharing resources. In the beginning, I was attracted to the practice because of the sharing itself but trying to understand this also required me to understand the matters, i.e. the food waste, that was shared deeper. I have described this earlier, but a central idea of the sharing economy was to 'optimise the utilisation of idle resources' (Botsman and Rogers 2010; Rinne 2014). As I discussed in chapter 3, 'Stories of the Sharing City', this came to be interpreted rather neoliberally by the wider public. The idea of using residual products at Hegnsholt corresponds to the idea, but rather than profiting economically, Hegnsholt's motivations are more about the ecological thoughts of circularity:

To me it is common sense; that we must think of the earth's resources. I also think that this is the way it was thought of in the old days, then this industrial society developed and we think of growth and productivity, and it's as if some things have been forgotten. [...] The goal was to free ourselves from the industry; that we could get leftovers from the restaurants, and the chickens could eat mealworms from here, and then they could eat the grass, and maybe some rapeseed and grains

.....
4) Johanne Schimming from Hegnsholt, Christian F. Puglisi from The Relæ Community, Karen Hertz from Grønvirke and I.

that we produce here, but it should have been produced here on the farm. [...]

The food residue is more important to me and the recyclable is more important for the organic certificate. I have considered that if it came to it, I would lose the eco-label to be able to recycle more.

Johanne wishes to keep the chains and flows shorter and closer in relation to concerns of *food miles*, as these long distance, complex networks also count in feed production: “So, it’s really something that is being transported over long distances, and I am annoyed that we are collecting proteins from India and China. Even though it is organic soya, it is still from South America” (Johanne, interview, March 2017). In the descriptions of conditions in modern poultry farming in the previous chapter, I mentioned how the design of the environment and breeding techniques and aims are established to increase productivity – amongst other things, to lay more eggs and to grow faster – and this is also embedded in the design of feed. For industrially produced chicken meat and eggs, the chicken feed is “‘optimised’ to cover the needs of the chickens at the lowest price” (Jensen 2016). The feed is comprised of a mix of ingredients, counting wheat, peas and rapeseed and necessary amino acids, vitamins and minerals are added. Medicine is added to the industrially produced feed in the form of approved coccidiostats to avoid serious diseases such as bowel coccidiosis.

For years, antibiotics have been added to the prefabricated feed, so-called growth promoters, as described in relation to the breeding and production standards in chapter 4 ‘Humanimal relations’, to increase growth and reduce feed consumption (Jensen 2016). However, in order to avoid the development of antibiotic resistance among chickens as well as humans, the use of antibiotics is declining (Jensen 2016). Furthermore, enzymes and cultures of bacteria and yeast have been developed that provide better utilisation of the feed (Jensen 2016). In the previous chapter, I described the development of cyborg chickens, as Watts (2014:394) defines them, and he points towards the relation between feed and this transformation:

[Since the mid-1920s] the industry has been transformed by the feed companies, which began to promote integration and the careful genetic control and reproduction of bird flocks, and by the impact of big science, often with government backing. The result is what was called in the 1940s the search for the ‘perfect broiler’ (2014:394).

For Johanne, it is about using earthly resources (here in terms of food waste) more environmentally reparative; because of the chicken’s livelihood as “they enjoy it so much”; and for reasons of taste: “alternatively, when they can eat grass, worms, flowers, vegetable leftovers, and breadcrumbs, and that goes into the eggs, the eggs get a very different taste” (Johanne, interview, March 2017). For now, I just want to highlight Hegnsholt Farm’s motivations and ambitions to use residual products as feed, and I will go further into the aspects of taste in the last section of this chapter which links to gastronomy. From a consumer’s mouth, the food that comes from the animals is *more* ‘actual’ and ‘present’ than the rather invisible feed and environments that have been part of making ‘it’; the final food is what we see, eat and taste, but we are often not familiar with the different human and non-human practices that turned this into something humanly edible. For Johanne, it is those surroundings and the feed that are her companions in the ‘making with’ and, therefore, I find it important to understand feed a bit more in detail.

Johanne directed me to some of the producers and distributors. I studied Danish Agro’s website, and while I could not find one ingredient list over the feed of egg-laying hens, I found a feed product that “efficiently reduces deviant behaviour such as cannibalism. A permanent opportunity to keep aggressive hackers of other animals and prevent accumulation of stress in the animal group. It meets current animal welfare requirements in poultry farming. Organic.”⁵ I have not found studies on whether there are traces of the substance that reduces deviant behaviour in chicken meat or eggs. Traces of antibiotics, pesticides and endocrine disruptors have been found in food, and it is acknow-

.....
 5) Danish Agro product website: https://kundeportal.danishagro.dk/index.php?action=shop_show_item&varenr=v_30186&utm_medium=produktfeed&utm_source=danishagro&utm_campaign=Fokusvarer+fjerkr%C3%A6 (Revisited December 5th, 2018)

ledged that feed to some extent ‘embodies’ the food we eat, that then embodies the bodies that consume the food. It could be explored how feed with substances of behavioural abilities might also affect the eater’s minds and well-being. I have also not found the specific ingredient list of the DLG Group’s chicken feed, one of Europe’s largest heavy goods corporations owned by Danish farmers, but their feed production is developed in accordance to following value position:

We have a comprehensive range of poultry feed adapted to Danish conditions and adapted to future production where quality, productivity, animal welfare, security of supply, environment and food safety requirements are crucial. [...] We are constantly working to ensure optimum productivity at the best possible price.⁶

As I discussed in the previous chapter, animal welfare is interpreted and practiced significantly different within industrial practices and the practices of Hegnsholt, and I have asked the DLG and Danish Agro how they interpret ‘animal welfare’. DLG’s official mission statement and value position should indicate where their main focus lies, which, as I understand them, is a clear agri-industrial (Shiva 2016b) positioning and practice. Hegnsholt’s feed practice is more time-consuming, nonetheless, they do it because they find this most enjoyable for the chickens and meaningful in relation to addressing environmental change by recirculating waste to feed and to enhance a delicious taste. During March 2017, the exchange with food waste was minimised – Johanne still received food waste from some supermarkets and leftovers or odd vegetables from nearby farms, but she and the chickens and hens were more dependent on the prefabricated organically certified feed. Johanne describes how she can observe that the hens and chickens find the food waste much more enjoyable by their way of walking, clucking and stirring the food around. She also mentioned how she and some of the restaurateurs can taste and see a difference in both the eggs and meat when the prefabricated feed increased and how it was not for the better (interview, March 2017).

6) DLG: <https://www.dlg.dk/Foder/Fjerkr%C3%A6> (Revisited December 5th, 2018)

Exchange agreement closure

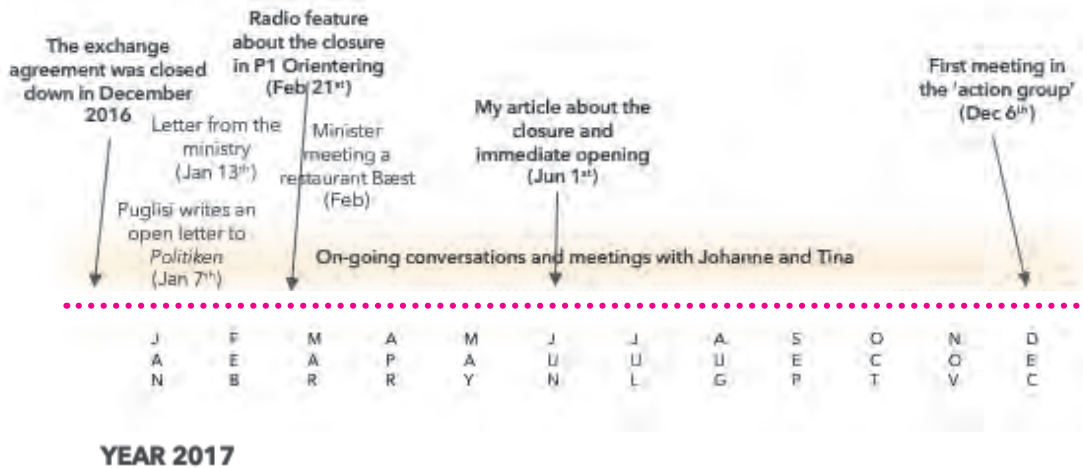
Halfway into the research project (December 2016) as the Sharing City Project was finishing up, I (as responsible for the knowledge track) was contacted by the radio of the Danish Broadcasting Union. They wanted to make a radio feature about the learnings from the Sharing City. I suggested that they interviewed Hegnsholt, amongst others, because I considered the exchange agreement as an extraordinary and alternative story about sharing economy, sustainability and planning; an alternative to sharing economy platforms such as Airbnb and Uber. Johanne and Puglisi agreed to participate in the feature and I did an overview of the Sharing City Project findings (Tjaerandsen 2016). I was quite excited, maybe a bit naïve, but two days after the feature (in December 2016), a mobile task force from the Danish Veterinary and Food Administration showed up at Puglisi's restaurant *Bæst* and at Hegnsholt. Both were reprimanded; Hegnsholt for feeding animals *waste*, and Bæst for running an illegal feed production.

To help follow the story's events as well as the closure and the different responses, I have sketched out this timeline adding significant events and meetings. The ones in bold writing, I was part of myself, the ones in regular writing were essential to the story and practices, however, I was not a part of them:

I asked Johanne how the exchange agreements started and their process, and she explained:

It started as simple exchanges with a few restaurants, but then it grew into a larger a number, and at one point, at Amass, they had heard from Noma that they had had some issues because they had given vegetable leftovers to those who delivered eggs to them. And that was just last summer. I then contacted Comida, a food advisory company, and we reviewed it and they actually advised me about it, and they actually believed that it was legal within existing EU legislation. So, in that way, I really felt that I had the dialogue all the time, but also had this company consulting me and there was actually one of the restaurants - Admiralgade - who had had a visit from the Food Control and

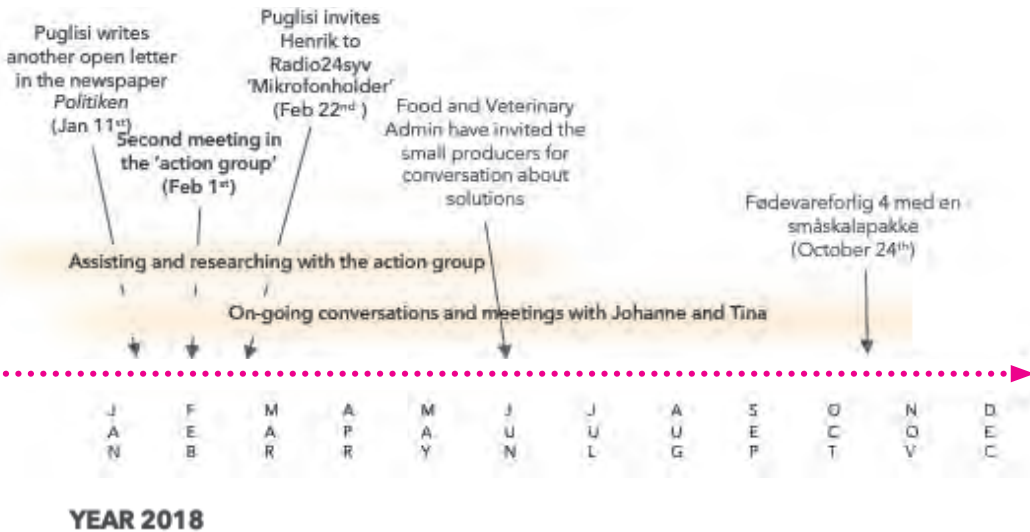




they had talked openly about the exchange collaboration and the Food Control had been fine with it. [...] I had looked into the law online, and so, as I read it, it was obvious that, of course, no waste was to be given to the hens, and it was also written that these leftovers from the restaurants were considered as waste, and it was illegal to give it to chickens. But then, in the regulation on byproducts, it said that bread and vegetables could be given to chickens, and my interpretation was that it never became waste [vegetable residue and bread], so I did not think this waste part was relevant to us.

In January 2017, Puglisi wrote an open letter to the current Minister of Environment and Food at the time, Esben Lunde Larsen, published in the national Danish newspaper *Politiken* where he fiercely criticized the Minister. The Minister had recently launched the report "Finding a Better Way – the Danish Way"⁷ that particularly argued that these kinds of exchanges (as a circular economy) should be possible. Puglisi used this as an argument for his critique:

7) Link to website and report: <http://foedevarefortaellingen.dk/> (Accessed October 8th, 2018)



Timelines of the closure and responses

We ARE [in fact] some – more and more actually – that are doing something. Not only wishing but acting. With this open letter to you, we strongly appeal to the willingness for change, a point that “Finding a Better Way” itself points out as necessary. Because we constantly meet barriers when running a business, both sustainably and unambiguously sensible without waste and loss of materials and in close symbiosis with our suppliers. (own translation, Puglisi and Arnbjerg 2017).

It was not only the closure that gave rise to his frustration but also his bureaucratic fight to legalise their fresh and local mozzarella based on raw milk from his farm in Lejre. On the back of this open letter to the Minister, the Minister invited himself to the restaurant. A lunch meeting was held and a journalist was there to document the conversation (Dahlgager 2017a). At the meeting, the Minister told Christian “that Bæst may be allowed to deliver vegetables to the hens if they register themselves as feed producer. He [the Minister] also acknowledged that the system has been created for someone other than Bæst, and advised that the government is to look at ob-

stacles that hinder, for example, the circular economy, recycling, and others, in the spring.” (Dahlager 2017a). In this interview, the Minister is also quoted to have said: “We have been accustomed to a system where, for example, milk either goes to the supermarket or gets exported, and traceability and food safety have been paramount. We cannot jeopardise this. But perhaps we need to track more, depending on where the end product ends up” (Dahlager 2017a).

Furthermore, Ida Auken, a Member of Parliament who advocates circular economy, asked the Minister of Environment and Food at the time (Esben Lunde Larsen) about the possibilities for Hegnsholt to exchange byproducts (December 20th, 2016). His answer⁸ was:

If a restaurant wishes to supply feed to farmers, there are two conditions that must be met: 1) the restaurant must be registered as a feed business, and 2) raw vegetable materials to be used for feed must be handled and stored separately from the cooking area as farmed animals must not be fed with kitchen and food waste. These are EU rules that are set to ensure that food-producing animals do not receive feed that can pose a risk of contamination to animals and humans. The foot-and-mouth crisis in the UK, the Netherlands and France in 2001, is an example where the infection was most likely due to the foot-and-mouth virus being transferred to animals via kitchens and food waste. The restaurant can register as a feed business on the Danish Veterinary and Food Administration website and inspection visits can be carried out together with the Food Control, whereby the restaurant is not imposed with additional control costs. It is of high priority for the government that food producers can make better use of resources, and therefore, it is important that no unnecessary barriers are imposed on companies wishing to promote a circular economy. I will, therefore, look at how the current rules can be handled practically for that purpose to cater to the companies. (January 13th, 2017, own translation)

This was interpreted as a positive and inviting answer. Yet, Bæst was registered as a feed producer and the residual products were already handled separately, and still, they received no official clearing from

8) Miljø- og fødevarerministerens response to question nr. 277 (MOF alm. del) posed December 20th, 2016 by Ida Auken (R). Response from January 13th, 2017.

the Danish Veterinary and Food Administration. Furthermore, while the Minister visited Bæst in February 2017, the officials who also participated, told Puglisi that he shouldn't get his hopes up as it was EU-legislation and, therefore, almost nothing could be done about it for now as it would take years to change the regulation. I did not attend the meeting, but Johanne mentioned the event (fieldnotes, April 2017) and we discussed it at a later meeting (fieldnotes, January 2018). The space for getting food waste accepted as feed for livestock was, on top of everything else, experienced as in a deadlock between political visions and technocratic rigidity – a space that seemed impervious to encounter for outsiders of the institution. As a response the following year, Puglisi highlighted the story: “However, some of the officials sounded less convinced when I spoke to them, while the minister was keen to be shown around. Because what if someone came from Korea and ate at Bæst and heard that we give leftovers to chickens - they might go home and tell the rest of Korea. Then, it will shut down the export of Danish chicken to Korea completely. You can understand that.” (Puglisi 2018).

I heard about the closure in the middle of January 2017 and felt responsible because I had involved Hegnsholt in the radio feature. With Johanne's approval I contacted the Danish Broadcasting Association again and told them about the closure, and they put together a feature where Johanne, Christian and I participated. They also had comments from Stig Møllergaard, Deputy Manager at the Danish Veterinary and Food Administration, unit for animal health. (Skovlunde 2017). In this interview, Møllergaard mentioned that due to EU-legislation, food security and the dangers of contamination, it would be impossible to open these kinds of exchanges. In an interview to *Politiken* (Dahlgager 2017b), Stig Møllergaard explained their decision further:

“Danish authorities are open to changing the rules, but the countries around us are terrified for a repeat of the mad cow disease from the 1980s, where cows were infected with BSE [Bovine Spongiform Encephalopathy] from bad feed with meat residues in. There is a mad cow disease paranoia within the EU. [...] In addition, the major outbreak of foot-and-mouth disease in England in 2001, where 3 million pigs were

killed. At that time, a popular theory concluded that the outbreak started on a simple farm that gave its pigs untreated food waste from local restaurants, including possibly imported meat from a Chinese restaurant. Shortly thereafter, the EU closed down the use of kitchen waste as animal feed.

The debates were quite intense and gathered public attention because keeping hens is a widespread and common phenomenon in Denmark, which means that it was a relation and exchange that many citizens could relate to. While the Minister in the answer above and in an open reply published in the newspaper *Politiken* titled “We shall be able to feed chickens with leftovers” (Larsen 2017), communicated an ambition to find a solution, the officials in the Danish Veterinary and Food Administration said something else. The political pressure also came from the Lord Mayor of Copenhagen, Frank Jensen, and the Mayor of Lejre, Carsten Rasmussen, both supporters of the exchange agreement who found the closure absurd (Dahlager 2017b). They argued that it would increase the quality and taste of the chickens and eggs, remove costs for small producers such as Hegnsholt, and reduce the waste of resources in the municipality. They also believed that this is a model that could be scaled up to canteens, public kitchens, and other city restaurants. In the interview (Dahlager 2017b), the Lord Mayor Frank Jensen argues that “It does not make sense that a minister launches strategies with great names to promote Denmark’s food production and to create rural growth with one hand – while at the same time, at the very lowest level, preventing the rural and the urban from working together to create and purchase sublime, locally produced food with the other”. 1 ½ years before, the Municipality of Copenhagen had given dispensation to the restaurants to deliver vegetable leftovers and bread to Hegnsholt. In an interview (Dahlager 2017b), the municipality of Copenhagen argued against the Danish Veterinary and Food Administration’s clause on the impossibility of feeding chickens kitchen residues due to a fear of mad cow disease, foot-and-mouth disease and swine fever, and believed the authorities to have a “too squared” approach to the rules. “We have the words of the experts that chickens cannot be infected with any of these diseases” (Dahlager 2017b).

The green light from the municipality of Copenhagen and the consultant firm Comida's and her own belief that it was the right thing to do kept Johanne's hopes high. Johanne was also in dialogue with the feed unit on another matter, and she was given the impression that bakeries giving old bread to farms was a common practice and that the practice with vegetables was a question of interpretation and politics.

Johanne: I mean, I also started reading these 17 feed regulations, but I gave up ...

Emmy: Because of the language or...?

Johanne: It's so complex, and they said one thing when I had a visit from the mobile task force and I said what I had read in all the different regulations, and so I could say, this one says that you must, but then this one says no, because this regulation says you can't, and that practice overrules the other one. So, I simply can't get an overview! Also, I had some questions that I had prepared [based on all the reading], and I felt like, okay, they [those from the mobile task force] can't answer any of them either so they will go and find out what the interpretation of the practice should be, and now they have spent 2-3 months and they still can't give me any answers about the different things.

[...] And I hear some of it as 'you can do this, if you want'; the politicians need to push the Danish Veterinary and Food Administration a bit and question: how can we make this happen? We can't put up with that EU legislation and it will take ten years to change it. We should not be satisfied with that answer. [...]

Emmy: And did you find that there is a political interpretation of those regulations or?

Johanne: Yes, I do not know if it's political, maybe it is, but you can say that it can be interpreted in different ways, and at least, there is unit inside the Danish Veterinary and Food Administration working with food safety that chooses to interpret it very strictly. And I don't know if this is because of political influence or lobbying influence or if it that is the right way to interpret it. But it can be said that the larger industry, which has an interest in export, is not interested in giving permission to using food residues as feed, because even though there

is no practical risk, there is a theoretical risk, and there will always be a risk if you relax restrictions, and they think we might squander export interests. Let's say my pigs and chickens at the farm suddenly got Creutzfeldt-Jacob disease, then some countries might not want to accept exports from Denmark. So, because we have major export interests in agricultural production, both pigs and eggs, [the export farms] there will be a great deal of pressure to not allow this. And that is also what I hear between the lines of what Stig Møllergaard is saying when he mentions 'export interests', illnesses and risk assessment. (Johanne, March 2017)

Early in May 2017, Johanne received information that she could once again feed the animals leftovers from the restaurants and eateries, but in August 2017 it was closed down again. The dialogue with the Danish Veterinary and Food Administration had reached a deadlock and throughout 2017 Hegnsholt Farm received 17 surprise inspections. At one point Johanne felt it very invasive and extremely stressful, as not only did it have consequences for the animals but also for the farm and her family-life (fieldnotes, November 2018).

Responding to a theoretical risk of contamination

By December 2017, Johanne felt exhausted and sad from the conflict yet maintained that feeding animals with residual products were extremely important and meaningful. She asked whether Christian Puglisi, Karen Hertz and I would like to meet to discuss the different perspectives and possibilities of how to make the exchange relation legal. She also invited a former politician, who had sat in the Danish Parliament and the European Parliament and had much experience with the European Union on these matters. Until this point, I had participated in the responses by debating on the radio and by writing an article about the exchange (Fjalland 2017), but I had mostly followed Johanne's work on the side. I accepted the invitation, but I was uncertain to what degree I could contribute, as food security and agriculture was not my strength or even *métier*. At the meeting, we agreed that I

could assist by doing research, reaching out to the academic community and looking for similar cases around Europe. This section presents the findings that resulted alongside Johanne's considerations about fulfilling regulatory requirements and meeting authorities. It will do so by accounting the actions and conversations of the action group, concerned with finding solutions and telling a different story. Due to Puglisi's position as a well-known and acknowledged chef and restaurateur, he was able to raise issues in popular media and I include these stories, views and reactions in the closure of this text.

The exchange agreement was hindered due to several theoretical risks (understood as 'what could potentially happen') of the spread of different diseases that could attack humans and animals as well as have a huge impact on export. At our first meeting (December 2017), we found that it was the argument of 'the theoretical risk of contamination' that was the main obstacle for continuing the exchange agreements, so I started looking further into it. Even though the Municipality of Copenhagen had declared that the chickens could not get sick from the mentioned diseases, we still had to follow the argument of 'theoretical risk of contamination' as this was the main obstacle. Bæst had been formally registered as a supplier of byproducts and residual products as the Minister had suggested, but nothing had happened since nonetheless and the dialogue with the authorities had stagnated. Puglisi wrote another debate article for *Politiken* (Puglisi 2018, own translation) arguing that:

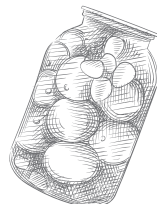
In April 2017, we got the green light to send leftovers to the hens again. [...] Then after confusing and contradictory messages from the Danish Veterinary and Food Administration - explaining that there is a theoretical risk of cross-contamination between vegetable peels and animal products in a restaurant - stating that we have to stop the practice entirely. A theoretical possibility of contamination, which does not prevent us from serving food to humans - just to livestock.

This resulted in a television news feature (Thomsen and Bundgaard 2018) with comments from Stig Møllergaard, the deputy manager at the Danish Veterinary and Food Administration, who once again

drew the same conclusion: “We have had some bad experiences in the EU with bringing diseases to livestock by feeding them with kitchen waste. Just small pieces of meat can be enough to bring infection to crews”. He furthermore argued that the rules are in place to protect the animals that can be infected (Thomsen and Bundgaard 2018).

Risk of contamination/ the wild and the domesticated

The theoretical risk of contamination and spread of infectious diseases was a recurring argument and theme. When it was first mentioned, Johanne immediately felt discouraged and everything seemed futile. Bringing the theoretical risk of the disease into the picture almost paralyses you, Johanne said: “I do not want to kill and harm anyone” (Johanne, March 2017). Meanwhile and during the negotiations in January and February 2017, Johanne and I talked over the phone several times and tried to figure out what was at stake. A month later we sat down and talked about it more in depth, as I was interested in how Johanne had responded to the pressure and debate:



Emmy: But did not you feel that it was an overwhelming argument? So, who knows EU-legislation? It almost became a weapon, or that is how I felt, as he used it on me there on the radio (It is this feature: Skovlunde 2017)

Johanne: Yes, yes, I did. I listened to it in the evening, before I was going to sleep, and when he said that, I simply began to cry. [I thought] oh, okay, so it is that simple. It was like everything completely closed and shut down. It was really discouraging.
[...]

Emmy: Why do you think it falls into such a “grey” zone?

Johanne: Well, hmm, it is probably because the part of the Danish Veterinary and Food Administration that the mobile task force comes from is the section of food safety, and they interpret the EU legislation so it is not possible to do it [exchange the residuals].

As it seems like there is a great reason to believe that this is a matter of

interpretation of the regulations and highly political, I was interested in exploring the rationality and idea behind the risk of contamination. Johanne explains that a common theory within the Danish Veterinary and Food Administration is that contamination comes from “the natural, the wild animals, and is brought by them to closed, domesticated livestock” (Johanne, March 2017 and December 2017). This perception has been backed up in my conversations with other researchers studying agriculture (fieldnotes, January 2018 and November 2018). Furthermore, in April 2018, African swine fever was found among wild boar in Hungary. The disease then moved to Bulgaria and Belgium. As a response, on June 4th, 2018, the Danish parliament agreed on a ‘wild boar fence law’ and, in August 2018, the Danish Environmental Protection Agency permitted the fence construction: a 70 kilometre and 1.2-1.5 meter high fence is going to be constructed along the German-Danish border which wild boars frequent.

The aim of this fence is to “support the government’s goal of eradicating wild boar in Denmark and preventing African swine fever from spreading to Denmark.”⁹ Something similar was going on when there was an outbreak of Bird Flue in March 2017 when I visited Johanne, and at the time, the response from the administration was ‘compulsory stable attendance’. At the time, I asked Johanne (March 2017) about her thoughts and experiences on these practices of isolation, fencing and closures. As described in the previous chapter (humanimal relations), Johanne considers this a crime on animal welfare. She believes that it is a completely wrong way of thinking, believing that everything can only be closed in sterile chambers. She elaborates (March 2017):

So, the Danish Agriculture and Food Council, which is this great interest organisation, believe that the animals living in the open are the weak part of Danish agricultural production because this is where you can get diseases in the production. Therefore, they prefer that all animals are kept in closed systems to maximise food safety.

Johanne fears that due to the increase in different disease outbreaks,

.....
 9) Announcement from the Danish Environmental Protection Agency: <https://mst.dk/service/nyheder/nyhedsarkiv/2018/aug/miljoestyrelsen-tillader-vildsvinehagnet/>

the ‘compulsory stable attendance’ can be utilised to a larger extent – to demand that animals stay indoors when there is a potential risk (but not yet an outbreak within national borders) (Johanne, March 2017). Furthermore, Johanne says there an increase in bird flu and an increase in industrialised poultry production, especially in China, where more and more animals are kept in smaller and smaller spaces. According to Johanne, there are studies showing a statistical link between disease outbreaks and disease mutations in large indoor productions:

Johanne: So, we don’t know for sure. The Danish Food and Veterinary Administration’s theory is that the diseases come from wild animals, but I know that there are a lot of other researchers around Europe who have a completely different theory. Namely, that new mutations occur in closed productions and that the manure becomes the carrier of the disease as the manure is spread on the fields. From here, wild birds get infected and spread the infection even more. I believe that from there, the understanding that the infection originated from the wild birds is now turning into a fact that the disease comes from the industry itself. And it is because we are keeping more and more animals in smaller and smaller spaces with poor welfare, common airflow, bad feed...

In the previous chapter, I mentioned how Hegnsholt has been inspired by past agrarian practice, where chickens primarily moved around the household and farm as small helpers, cleaning the yard and eating the leftovers. One of the mentioned risks of disease highlighted by the authorities is foot-and-mouth Disease. In 1884, there was an outbreak in Dover, England, where 461,000 animals were infected and two people died and 200 became very ill. It was shown that it came from a farmer who had sold contaminated milk from sick, infected cows (Jeffery 2001). Animals had been infected before, but this outbreak received attention, as humans – across social classes –were also infected (Jeffery 2001).

I mention this outbreak as a reminder that disease and contamination also happened in the past, and with the rise of modern science, and in this relation bacteriology, the disease was studied and found

to be viral. Tracing the disease and those who had fallen sick, showed that those who escaped the infection had received a special supply of milk from the milkman's own cows: "one man kept the good milk for his family while his servants drank from an infected batch" (Jeffery 2001). Furthermore, tracing the outbreak site of the disease led to a single farm and it was shown that "the dairy herd was kept in low sheds surrounding a small yard full of decaying manure that would have carried the disease." (Jeffery 2001). The residuals that Johanne wants to use as feed for the animals is completely different from this practice. Johanne does not want her animals to get sick, but she believes that small-scale livestock, fresh air, space to roam, muddy water and varied feed, and a variety of breeds with different DNA make the animals less vulnerable to these outbreaks. She acknowledges the concerns of large (huge) scale farmers as the consequences are tremendous: "There was an outbreak of bird flu in the United States last year, and in some of the places 2 million animals were kept together. If one animal gets sick you have to kill the other 2 million animals because they go together. It's crazy that there are such big units. Because the risk also becomes huge, huge" (Johanne, March 2017).

Disease and infection have always affected animals but current production methods and the mobility of food make disease spread faster and over longer distances. According to the Danish Veterinary and Food Administration, all species of cattle, pigs, wild ruminants, and sheep and goats are receptive to disease, and the outbreaks of foot-and-mouth disease increased after the Second World War and up until the 1960s, where there were frequent outbreaks in Denmark.¹⁰ "Since then, the number of outbreaks has been limited. The last outbreak of foot-and-mouth disease in Denmark was in 1983 in a crew on Funen. Foot-and-mouth disease is widespread in African, South American, and Asian countries. Outbreaks occur sporadically in some European countries. In the EU there was a major outbreak in 2001 when the United Kingdom was severely affected with 2,030

10) The Danish Veterinary and Food Administration: <https://www.foedevarestyrelsen.dk/Leksikon/Sider/Mund--og-klovesyge.aspx> (Revisited Dec. 10th, 2018)

outbreaks.”¹¹ The consequences are larger in terms of animals that are sent to slaughter if just one animal gets sick: as larger amounts of livestock are kept, the consequences increase complementary.

Studying agroecology, Shiva (2016a, 2016b) also shows the critical aspects of mutations that follow a certain technological logic of farming and points out how genetically modified seeds are reducing food production, as new superpests and superweeds become ever more tolerant to the chemicals and pesticides used to kill them. If it is the case that mutations are occurring within these sterile and associated environments, there is reason to think that ‘life always will find its own way’ as the character Dr. Ian Malcolm claims in Steven Spielberg’s film *Jurassic Park*¹². In early June 2017, I was planting cucumber and tomato sprouts in the greenhouse beds. Later in the evening, my right eye began to hurt and when I woke up the following morning, it was very infected. I had not used gloves while I planted the sprouts and there had been a lot of dirt under my nails. I remember that I had tried to remove some hair or dirt from my eyes at one point, and this must have been when the contamination took place. I had to go to a PhD seminar at Lund University and I remember sitting on the train with a very infected and swollen eye. I felt concerned about if I could follow three days of lectures. Although my body was welcoming these ‘others’ and trying to combat them, my mind was intrigued and rather enchanted with how the soil seemed alive, able to move, inhabit and embody me, and how we had now become related. From the soil, cucumbers and tomatoes would grow and we would eat them. We would relate in a pleasurable way as I would care for the plants and they would nourish me, both in the joy of home-growing and in the way food does. For the plants to sprout again and make space for the vegetables, I had to pick them, and I took some of them out to store seeds for the following year (fieldnotes, June and August 2017). I might be writing slightly speculatively about this desirable and less

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11) The Danish Veterinary and Food Administration: <https://www.foedevarestyrelsen.dk/Leksikon/Sider/Mund--og-klovesyge.aspx> (Revisited Dec. 10th, 2018)

12) Movie clip from *Jurassic Park*: https://www.youtube.com/watch?v=BFEVRYJ_QH0 (Revisited Dec. 10th, 2018)

romantic, infectious collaboration. Tsing discusses multispecies collaboration and survival and depicts that “we are contaminated by our encounters; they change who we are as we make way for others. [...] Everyone carries a history of contamination; purity is not an option.” (Tsing 2015:27). It seems like there are some sterile ambitions and desires with this taming of food waste and the particular view of nature as wild, contaminated, and potentially dangerous and therefore as something that shall be tamed. Discussing ‘taming’ (taming bacteria, chickens and food wastes in this particular study) is part of a modernist perception on the natural-cultural division and is essential to the current, academic debates about the so-called Anthropocene (among others, Brett-Crowther 2016; Haraway et al. 2016; Latour et al. 2018; Tsing et al. 2017; Vannini and Vannini 2016).

To stay alive, to survive on the planet, we might think more along the lines of collaboration instead of taming, and Tsing (2015:48) moreover depicts how “collaboration means working across difference, which leads to contamination. Without collaboration we all die”. The biological, zoological and ecological responses to different medicines, chemicals, feeds and breeding are considered unknown, however, it is acknowledged that responses appearing as contamination collaboration seem inevitable. It is like a dangerous play where the master behaviour keeps trying to tame and control (the ecologies, biologies and zoologies) – as in ‘now, we have found the fix’ – but the unruly matters, including our bodies, keep responding in unexpected and odd ways. When contamination seems like it is constantly happening, we might need to change our strategy in terms of collaboration? Shaviro (2014:1) depicts that: “Whitehead and speculative realists alike question the anthropocentrism that has so long been a key assumption of modern Western rationality. Such questioning is urgently needed at a time when we face the prospect of ecological catastrophe and when we are forced to recognise that the fate of humanity is deeply intertwined with the fates of all sorts of other entities.”

In her book, *Neighboring Plants*, Ahl (2018) describes how plants carry

something, a matter or an ability that can be helpful or harmful to other plants. For example, stinging nettles help their neighbouring plants grow more resistant to rot, and it is this kind of (not always innocent) ecological contaminous collaboration that we might reinsert into the logic of food production, while working with ecologies and biologies, known and unknown, learning along the way, because unruly mutations will happen despite how much we try to tame the “wild things”. What we as humans can learn from observing the mutating and travelling bacteria – among plants, in soil and in poultry farming – are alternative contaminations and collaborations. Observing these might help us critically question what kind of environments, for life and well-being, we are inviting, while we transform landscapes according to food production and food mobilities. We might question what kind of inspirations these non-sterile, “wilder” environments hold for alternative rhythms, economies and collaboration in a capitalist, industrial logic. In the end, it is the biosocial-relationality that keeps us alive, this lived before ‘us’ and will live beyond us, in mutations (Shiva 2016b). While I am not yet certain where this kind of thinking would take us, I believe we need to rethink and reframe the humanimal relations in agriculture and the practices of landscape transformation that feed us.

Within urban theory, Ash Amin and Nigel Thrift (2002) also depicts how diverse urban cultures and environments are stronger and more resistant to systemic failures. I do not wish to reduce the social to biological processes or the other way around, but rather to think about them as inspirations and explore their relations, contaminations, mutations and collaborations. This kind of sensitive cultural and ecological knowledge seems more important to cultivate other world-making practices than long-distance ecological destructions of landscapes, atmospheres and biospheres. I am aware of the difficulties in crossing disciplines and the ‘fight’ that the social sciences and humanities have had to cement their value and importance. Due to the current devastating situation of the biosocial sphere influenced by significant human actions (while noting that not all humans are responsible (Malm and Hornborg 2014) this entails the attribution of

fossil fuel combustion to properties acquired during human evolution, notably the ability to manipulate fire. But the fossil economy was not created nor is it upheld by humankind in general. This intervention questions the use of the species category in the Anthropocene narrative and argues that it is analytically flawed, as well as inimical to action. Intra-species inequalities are part and parcel of the current ecological crisis and cannot be ignored in attempts to understand it. Since Nobel laureate Paul Crutzen (2002), I will, along with other researchers, also suggest a careful, close and curious collaboration between humanities, social science and natural sciences. We are all in this together, biologies, ecologies and cultures, and that means that it can't be 'fixed' by one disciplinary direction alone. We need to understand collaboration, resistance, and contamination in new ways and, as Mathews points out, that "the unruly obstinacy and liveliness of nature is a resource for people who go about making knowledge about what they are, what the world is, and what the state is" (Mathews 2011:26). We need stories and knowledge that go beyond the desires of taming the wild, we need more fermentation; not to necessarily get eye-infections, but to learn to work with nature more reparatively, and explore and cultivate the possibilities that are right here, right now.

Grasping sterile desires

I believe that thinking of 'contamination as collaboration' is about beginning the fermenting process of the sterile desires, but first I want to explore the matter itself. Collaborating with the "wild" does not have to be an idea shared with the dominant instrumental logic of agriculture (Gan et al. 2017; Mies and Shiva 2014; Sachs 2009; Shiva 2016a; Swanson et al. 2017). I am not against instruments nor technology, but instrumental and technological thinking has some restraints. I am suggesting to involve affective and sensuous as well as biological, cultural and social aspects to understanding human-animal relations and matters of contamination that the instrumental thinking does not encompass or acknowledge (Fisher 1979; Le Guin 1982, 1986; Haraway 2016; Hoffmeyer 2015; McDowell 1999; Pink 2012; Sandercock 1999).

At the action group meeting (December 2017), we discussed the ‘theoretical risk of contamination’ and it was met with concern, worry, anger, humility, frustration, and a desire to find out what the ‘real’ risk implies and the rationalities behind this logic. We decided that I could try to reach out to the academic community, to find similar experiences, reflections and ideas of how to engage with the risk of contamination (fieldnotes, December 2017). I found that the risks of contamination were real – in theory, as they could potentially happen. It was suggested that the only way to encounter the ‘theoretical risks of contamination’ was to collaborate with a few veterinaries and epidemiologists to benefit from their knowledge about the diseases concerned. They could spell out the disease and be very precise about where it might arise, specifically in the network, places and practices. Following this, everyone in the exchange network would suggest what they could do to encounter the risks and avoid spread of disease in and from their particular practice. This could help ‘sanitize the circle’ using a similar ‘risk’ logic, although with attention on the particular practice rather than universal/general theoretical attentions. The idea was that this could help convince the authorities that what counts is not the theory but the well-cared-for practices (fieldnotes, December 2017).

I suggested this to the network and we tried to find someone willing to do it, but while I was calling around it seemed rather impossible. I promised to keep the people I talked to anonymous so they could not be held responsible. Furthermore, one person told me that we should be aware that those specialised in looking for risks will see risks everywhere (fieldnotes, January 2018). *Risk* has been a research subject for sociologists as Ulrich Beck (1992), Zygmund Bauman (2000), and Sven Kesselring (2008), and they show how technological, ecological and scientific risks pierce every aspect of society and creates societies where social structures become unstable and permeable, and responsibilities individualised. Exploring the dynamics of the outbreak of foot-and-mouth disease in England in 2001, Law (2006:228) addressed the risk debate and an engineerical mode of control, depicting that “attempts to avoid disadvantage and disaster also

help to generate the very conditions for disaster in the first place.”

I would like to add that ecological structures are also unstable and, therefore, ‘accidents’ and ‘contamination’ are normal, and the risks and both abstractly distanced and disembodied and yet, their politics and practices, are so penetrative and fixating that they block the thinking of alternatives; and block fermentation. The disciplinary thinking of a ‘natural science’ such as veterinary and epidemiology studies seems to assume an objective ontological position mostly. However, I would argue that this specific conversation portrays how knowledge production and realities emerge out of a situated perspective. We did not find anyone who could/would “sanitize” the circle, but what I took from the talks was that there seemed to be extremely little risk within this particular network, and the event of an outbreak would have large economic consequences for national export and mean that these local farmers would then have to cull their livestock (fieldnotes, January 2018).

It is highly dubious whether the hens at Hegnsholt Farm could be carriers of disease, but the few pigs and sheep at Hegnsholt could be contaminated. When I asked Johanne about this, she described how the pigs in the foot-and-mouth disease outbreak of 2001 in England and France were contaminated by feed that came from a slaughterhouse (Johanne, March 2017). Law & Mol (2011) shows the feed consisted of leftovers and rotten parts of sick, infected animals, probably imported illegally. Johanne explains further that “it is something completely different from the residuals we give them” (Johanne, March 2017), as these do not include meat, but are vegetarian and come from partners that she knows well and with whom she has a relation built on trust. We discussed this at the action group meeting and Christian stated that that is exactly the point and value of creating small, close relations between restaurants and suppliers. Because, if you actually know each other, talk together and cultivate the same values, you work on trust and mutual dependence and would not want to corrupt or ruin neither the produce nor the people. Your products and organisations depend on the relations and, therefore, you also share



the risk (fieldnotes, December 2017). For instance, Johanne and Christian both took a risk with the desire and belief to feed the animals at Hegnsholt Farm with the food waste from Christian's restaurants, but they also work together to find a way out of the closure. They, so to say, respond together with different voices but with a common value and practical relation, and their relation is built and cultivated on mutual trust. This is different from the industrial global movements of food (and waste), where Law (2006:237-38) points out that:

Another part of this engineering is the hope, the aspiration, to regulate the relations between the flows of materials in particular and chosen ways, such that there are proper barriers (for instance, to keep viruses and animals apart), or there are appropriate exchanges (for instance, the interactions between attenuated strains of viruses in vaccinations and the animals themselves). In contemporary industrialised agriculture all of this fluid engineering, the engineering of flows, barriers, and exchanges, is attempted to an ambitious degree. The aspiration is to standardise flows and exchanges on a global scale.

But the outbreak of foot-and-mouth disease present the vulnerability of large-scale abstracy systems and flows in that "the evidence was overwhelming: the pigs had been infected by unsterilised waste that had, somehow or other, included illegally imported meat products" (Law 2006:233). In this situation, the exchange between Christian and Johanne (or indeed the other eateries in the Hegnsholt network) seems less vulnerable as Johanne has to trust that Christian knows how to sort the residuals and Christian has to trust Johanne's delivery and quality of products. It is a near, concrete and rather visible practice. Their mutual trust is also reflected in a mutual dependency, response-ability and security. The use of mad cow disease as an argument to close down the exchange relation is furthermore peculiar in this relation, because chickens cannot get the disease and the infection came from industrially produced bone and meat meal - not fresh, carefully sorted vegetables and leftover bread. According to the Danish Veterinary and Food Administration:

The Mad Cow Disease [BSE] was first diagnosed in Britain in 1986 but

has probably existed in the country for an extended period of time. Surveys in Britain have shown that the disease is spread through meat and bone meal produced at reproductive sites of infected cattle. Meat and bone meal were previously used to a large extent in cattle feed. The disease has thus been amplified by the fact that cows have been infected with meat and bone meal. These sick cows are then delivered to destructive establishments, where more infected meat and bone meal has been produced, which is used in feed for even more cattle. [...] Mad Cow Disease does not infect animals from animals to animals, but only through feed. [...] Mad Cow Disease was spread from the UK to a number of other countries in the late 1980s and in the 1990s through exports of live animals and exports of meat and bone meal.¹³

While I am not able to sanitise the particular circles of the food waste exchange, I can respond to and reflect on the idea of ‘theoretical risk’ itself. In relation to mad cow disease, the importance of feed is again significant as it was caused by an industrially chemically produced feed, created to increase milk production within the agri-industrial logics, and worrying in relation to the discussion of mutual domestication earlier in this chapter and in the previous chapter. Johanne’s response to the argument of mad cow disease is:

But again, cows are ruminants and vegetarians, and they gave them feed that was not meant for them. But, as we can say, we have domesticated hens and pigs for tens of thousands of years and they have always lived on food waste, which is why they have been kept. So, they are somehow used to it, created for it, but it is this “natural” we are taking away from them now. (Johanne, March 2017)

John Law and Annemarie Mol have conducted research in relation to the foot-and-mouth disease and write in their article ‘Globalisation in practice: On the politics of boiling pigswill’:

How did the pigs on Burnside Farm catch foot-and-mouth disease?
The evidence remains circumstantial, but the vets will argue that the

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13) The Danish Veterinary and Food Administration own writing on the matter: <https://www.foedevarestyrelsen.dk/Leksikon/Sider/BSE.aspx> (Revisited October 8th, 2018)

virus that infected the pigs was carried in their swill. This swill consisted of food waste from catering kitchens. The food waste should have been processed but it is likely that the processing was not being done properly. In particular, it is likely that the swill had not been boiled. Thus illegal meat imports carrying living virus from a region of the world, perhaps Asia, where foot-and-mouth disease is endemic, were probably fed directly to the pigs which then contracted the disease (2008:134)

The solution might not be on the horizon yet, but let us bear in mind that it was the techniques and systems of treating the feed/food that failed and led to the outbreak of disease, as techniques often do (Graham and Marvin 2001; Kesselring 2008; Law 2006; Law and Mol 2008). Law and Mol (2011) outline what the foot-and-mouth disease is and how it was detected and examined during the outbreak in the UK in 2001. Their findings are similar to the story Johanne told and, significantly, the article draws attention to the different veterinary traditions within veterinary science. These different traditions mean that:

drawing upon different worlds as they do, clinic, lab and epidemiology do not know the same 'foot-and-mouth disease'. Each enacts a different version. They do so by attending to and thus giving importance to different materials, fostering different qualities, staging different timelines and engaging in different spatial relation. This tells us that the ontological realm each opens up, explores and strengthens is different. (Law and Mol 2011:13-14).

Altogether, there is a great reason to believe that the disease storytelling told and believed by the official authorities is used to preserve the interests and logics of industrial, large-scale agriculture. While it might be a direct intention, this particular story not only hinders the humanimal relations and practices at Hegnsholt, but every (alternative) practice that does not fit into the particular story. These theoretical risks, and the focus on global commerce draw my attention back to the sociological questions of risk. Kesselring argues, that "the rise of mobilities on every scale of the society - from the body to the global - radicalises the risk society and shows the global interconnectedness and the inescapable

character of the social and spatial mobilisation of modernity” (2008:92). Within these ontological lines of regulatory thinking, it seems hopeless to argue against the ‘theoretical risk’. The calculation of risk “can never be fully complete, since in relatively confined risk environments there are always unintended and unforeseen outcomes” (Giddens 1991:112).

With inspiration from Kesselring (2008), it can be depicted how the ‘theoretical risk’ is a concept from a modernist, instrumental logic that responds to the instability and permeability of structures. While the instrumental logic directs and plans stable universalities, the world in practice is situated, local, global and mobile and the instrumental response to this unruliness seems to be control and sterile taming. From this study, I would add that the structures will always become contaminated (within sterile and non-sterile environments) and responding to the constant mutability seems to require more than sterile logics and universalist risk taming desires (Fjalland 2018a). It seems to call for a sense of particular places and practices. Not a sense of local that is homogenous, fixed and coherent, but rather, as Doreen Massey (1994) argues, localities that are produced in the nexus of global and local practices – “constructed out of a particular constellation of social relations, meeting and weaving together a particular locus” (Massey 1994:154).

‘Local’ is understood relationally, and from what I can see within the practices of food waste in this study, they create a kind of material locality in practice and in motion. Therefore, writing that the world in practice is situated, local-global and mobile is depicted from the perspective that “human action is always situated in relation to specific environmental, material, sensory, social and discursive configurations” (Pink 2012:4), and, furthermore, “everyday life and activism are implicated in the making of places in unique combination with other processes; and it understands the persons, representation and material culture of everyday life and of activism as always being in motion (Pink 2012:6). The sense of place that I read about in the administrative practices seems to uphold and strive for ideas of boundaries, fixity and stability; an understanding of place that works with global mobilities,

openness and flows as an economic ideal, but to uphold the ideal, the administrative becomes deeply concerned with border control, sterility, closures and engineering hope of control (Law 2006). This comes at the expense of local relations, that are being met with suspicion even though the problems were not caused by these localities in the first place.

It is a vulnerable instability that food travels through long, entangled global commodity chains which have its roots in historical imperialist organisations of trade, as food travels and crosses many borders that are open to goods, while “the borders are also closed to travelling viruses and food-borne diseases” (Abrahamsen and Mol 2014:282). From this point of view, the industrial, capitalist logic of sterile desires neglects and refuses the microbiological process that is constantly happening around us, whether we want it or not, shaping landscapes and biological diversities. Those logics seem to refuse that the ecological world’s main process for transforming organic material is mutation; nothing actually dies, there is no dead matter because it is always becoming something else – food waste can be feed for animals as well as compost to rich soil. Therefore, this process of food waste could be perceived, culturally, as one of the most response-able, life-giving and richest economies that humans should work with and not against - this is the culturally, biologically and geographically transformative gesture of food waste.

Andrew Matthews (2011) works with the relationship between “bureaucratic authority, institutional power, and knowledge and to the power of publics in the making of knowledge” (2011:21) in relation to Mexican Forest Service. The negotiations between the authority and Hegnsholt is conflictual and intense with a myriad of paragraphs and regulations to ensure legibility and transparency. In this case, bureaucrats seem to “juggle between local context and sweeping generalisations, between locality of their audiences and the global knowledge, general regulation or national policy” (Mathews 2011). Mathews defines this as “uncertain authority” which is a vulnerable power, always in performance, and with the risk of being disrupted (Mathews 2011:5).

While it could have been fruitful to interview the state representatives involved in this case, this study has been on Hegnsholt's (and its companions) collaborative resistance, responses and negotiations with authorities and bureaucrats. From their experience with mobile task forces and communications with the officials within the Food and Veterinary Administration, it seems like there has also been a negotiating practice among the administrative offices and between the bureaucrats themselves, and therefore it is incomplete to write *the* authorities as one unit (fieldnotes, March, April, August, December 2017 and February 2018).

From the perspective of the experiences of the action group, the authoritative answers and arguments for closing the exchange relation, media stories and regulatory documents, I am suggesting how the state performs its bureaucracy, their role in official knowledge-making and materialisation of (political) futures, and the experienced internal confusion as well as disagreement *within* the authoritative units on how to deal with the unruly matter of food waste. From this perspective, politics seem to take place within multiple places of the authoritative institution and outside the institutions. Therefore, what seems vital in addressing the environmental crisis, is a profound shift away from this form of top-down, technocratic, disembodied form of knowledge (Mikulak 2013), and involving situated stories (Gibson et al. 2015; Le Guin 1986, 2017; Haraway 1988; Sandercock 2003) is transformationally fruitful, as stories have the ability to actualise the nuances of our acknowledged norms and realities and, therefore, hold the potential to enhance cultural imagination and ideas for other realities and orders (Fjalland 2018b).

Trying to respond with other stories

This exchange agreement is not about deliberately exposing humans and non-humans to the dangers of infection and contamination, but rather to argue for the involvement of a situated knowledge practice in decision making. We discussed these findings further in the action group and, as Johanne had already had the consultant firm Comida's

analysis saying it was within the frames of EU legislation as well as the Municipality of Copenhagen giving the all clear to the exchange agreement, we decided it should be addressed differently. It seemed impossible to counterargue the ‘theoretical risk’ within its own logic and we talked about changing the premise of the debate and instead discuss potential futures of sustainable food production. By coincidence, Christian was contacted by another radio station that wanted to feature him in a program called ‘Microphone stand (in Danish “Mikrofonholder”), where he could invite a person he wanted to talk to – by passing the microphone. Christian invited the agrarian economist and smallholder, Henrik Kuske Schou, from the association “Free farmers – Living Land” (in Danish “Frie bønder – Levende land”) that advocates small-scale farming. Kuske Schou came in this relation but he also worked in the Danish Veterinary and Food Administration’s Feed Unit.

The theme of the feature was how to change the habitual thinking in Danish agriculture (Fabricius 2018) and the meeting took place at restaurant Bæst and their next-door bakery Mirabelle. Within the feature, Puglisi shows Kuske Schou around the different kitchens and talks about the practices and processes. As they visit the place where the bread is stored, Puglisi explains how it is made, packed and stored, and how the untouched bread, after 3-4 days, is turned into crumble or could be used as feed for the chickens at Hegnsholt Farm. Kuske Schou says that “what we can see here are some shelves, and there is nothing, from what I immediately can see, that could potentially contaminate the bread with animal protein, like meat juice and so on.” (Fabricius 2018, minut 19.02 into the feature). Furthermore, he says it is important that they describe how they will work to ensure that this will not happen in their practice and that they, in their risk assessment, explain how the bread avoids animal contact. Afterward, they walk through the scullery where they handle the vegetables – the basic preparation – to the place where they conserve the homemade charcuterie and finally into where they make their cheese, the micro dairy production area.

In the scullery, Puglisi points put the specific produces and what they



consider to be edible. Kuske Schou comments that the room is nice and clean and there are no signs of any sites where contamination practically could take place, “so it is rather difficult for me to understand why it is not possible for you to use these byproducts and leftover products as feed, in this kitchen, this scullery, that is totally isolated from the rest of the restaurant and has no sites of contamination with animal protein of any kind (Fabricius 2018, from minut 25:25 into the feature). While Kuske Schou also represents an association that supports the value of small-scale local farming, he was as close as we got to a person able to sanitize the exchange circle. Getting his views and statements was important to explore the local risks, and it was interesting to see whether this use of a kind of ‘sterile logics’, otherwise performed by the administration, would help legitimise the use food waste as livestock feed. This took place outside of the official administrative work and was therefore not officially legitimising, and I am not aware of how it has pushed the administrative views on the case. For the most part, this has given Johanne further hope and aspirations to fight for the legitimisation of food waste and to resist accepting the ‘risk of disease’ story.

Yet, this was neither enough to open the debate nor to make the specific exchange agreement into a site of regulatory innovation and experimentation. Johanne heard rumours that we should be careful and not push the matter further as they were quite frustrated within the administration (fieldnotes, April 2018). Furthermore, there seemed to be a gap between the political ambitions of enhancing a circular economy and the administrative civil service on the matter, but there was some outreach from the authorities at the Municipality of Lejre. The Danish Veterinary and Food Administration had formed a group that would visit small producers to interview them about the regulatory obstacles they experience and get knowledge about the small producers ‘guest journey’ with the authorities. It sounded promising and in June they meet at a meeting at Herslev Bryghus to communicate the findings – among the participants was Tina (from Lejre Municipality and Herslev Klyngen), Puglisi and two other working at Hegnsholt. I did not participate in the meeting, but they told me that there was an interest

in dialogue, that the authorities were interested in improving their service and dialogues whereas the small producers were interested in finding regulatory solutions, and that the local producers and municipal actors had suggested pilot projects, temporary small-scale projects for innovation, and small sites for experimentation. Considering the different response-abilities between the different societal actors, Tina put forward some considerations that could direct us forward:

I think that I have come to the conclusion that if we are to find solutions to our concern [regarding an earlier conversation about fear of environmental change], it is somehow the entire society that needs to develop. [...] To me, it's important that it's the politicians who set a direction, adopt this vision, manifesto, or whatever it is, a story that grasps people, inspires them and gives them some hope. They [politicians] are supposed to be ambassadors. It's important because politicians, the higher up they are, move in other circles to us, and that means they can create other contacts and knock on other doors. They may see a relation that we don't know about because we are stuck inside our own little bubble of professionalism. It is important that they do it. And also, the power they have to actually make a change is important, because we also have to consider that our legislation today is a result of "yesterday's" farming. And in Denmark, it [the legislation and regulation] is written for industrial agriculture and exports, and in that context, it can be very difficult to develop a new form of agriculture, and therefore, they [politicians] must also use their power in relation to that. It is important that they do that. But the politicians should not decide what should happen in detail. Organisations - like for instance Organic Denmark, The Danish Agriculture and Food Council, and The Danish Society for Nature Conservation - have a professional knowledge that is essential, they have a network that is essential, and they can communicate. It is very important that they do that. And most important of all are the citizens, farmers and companies. Those who *want* something. Those who want to *do* something. It is my impression that many of the companies that are getting established today are in fact someone who has a [response-able] purpose. Of course, they have to make money, but many also work in a way to create a good place of work, do something good for society, and whatever other purposes they may have. Therefore, the private actors are, in fact, strong transformative actors, because you [as a municipal] don't have to support them financially give them money to do it. They

do it themselves.

Within the case of this study, the political ambitions and visions for a more circular economy seem to have been trumped by specific administrative regulatory practices and specific interests. Together, this seems to call for a further study of how to reinsure politics within politics. On October 24th, 2018, the parliament agreed on Food Settlement 4¹⁴ (in Danish Fødevareforlig 4) which settles the framework for food control and safety for the next four years. The agreement contains a ‘small-scale package’ (in Danish ‘småskalapakke’) that has the potential to make it easier for small, innovative producers and companies to market their products and thereby play a role in rural politics and as suppliers of gastronomy. Organic Denmark (Økologisk Landsforening), an interest organisation, praised this particular package in a press release. The association’s chairman, Per Kølster, stated that “together with Lejre Municipality and Christian Puglisi, among others, we have succeeded in making politicians and directors aware that current rules slow down the ability of small, innovative producers and companies to get new products on the market.” (ØkologiskLandsforening 2018).

The activist practices of the partners in the action group and at Hegns-holt might be slow and working step-by-step, but this agreement seems to provide some hope. Although, I am still sceptical as it is the economic (market and product) rationalities that take priority and are used as arguments (from the quote above) in environmental and ecological values. Furthermore, on the Ministry’s website they state that “the parties agreed that the Food Agency in future should follow ‘problem companies’ much closer. On the other hand, the control is simplified for companies that comply with the rules.”¹⁵ I am not trying to be a spoilsport, change happens slowly and the economic arguments may come in an environmental advantage here, creating a space for exploration and

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14) The official statement from Ministry of Environment and Food: <https://mfvm.dk/foedevareer/foedevareforlig/> (Revisited Dec. 13th, 2018)

15) The official statement from Ministry of Environment and Food: <https://mfvm.dk/foedevareer/foedevareforlig/> (Revisited Dec 13th, 2018)

innovation. Furthermore, I find the statement of the Ministry worrying because who and what are defined as problems. Within the current regulations, administrative practices and (political) interests, Hegnsholt's practices have posed a regulatory problem. Whether Hegnsholt's practices will continue to be among "the problems" or not depends on how the statement is interpreted in practice and in other politics – and how food waste and ecological concerns are interpreted and addressed.

Fermenting sterile desires, another carrier bag story

The process of getting food waste or residual products accepted as feed for livestock and Hegnsholt's other humanimal practices are constantly, although slowly, being nurtured, negotiated and developed. While writing up this thesis in the late autumn of 2018, there are still no clear openings or solutions on how to feed livestock with the kind of residual products circulating in the Hegnsholt exchange. Throughout the last 6 months, the negotiations, or lack thereof, with authorities have affected Hegnsholt and Johanne both economically and in relation to health, and after careful consideration, Johanne's response has been to increase the prices of eggs, but on the condition that the chickens and hens are only fed with residual products. Everyone in the exchange circle has accepted the cost increase and premise and she is using the surplus to hire Comida, the external consultant firm, to help find a solution and take over some of the negotiations and debate.



What can be concluded is that if we look for risks, risks appear everywhere, and following this acknowledgment, the argument of the theoretical risk of contamination seems impossible to argue against within its own rationality. The exchange is not possible within current administrative interpretations of regulation and within the instrumental logic of food production and agriculture. With this chapter, I am suggesting that this particular case must entail a broader political discussion of what kind of agricultural practices should be preserved, cultivated and nurtured in relation to working for a reparative and

response-able biosocial future. While the answers will vary depending on the perspective, this study depicts that responding to environmental change involves a cultural and ecological sensitivity and attention towards response-able humanimal relations and reparative practices as ‘contamination as collaboration’, and food practices and exchanges based on mutual trust and dependency. These practices and relations are older than the industrial logic and sciences, and over time, the storytelling of Hegnsholt’s practices become a reminder rather than reinventions. This sensitivity and attention involve particular and situated knowledge about places, people, practices, and non-human relations, as well as another sense of multispecies collaboration and other practices of contamination, the wild and unruly. Vandana Shiva has shown how “[...] a certain *type* of science was promoted and privileged as the *only* scientific knowledge system. Two scientific theories came to dominate this new, industrial paradigm, and they continue to shape practices of food, agriculture, health, and nutrition every day.” (2016b:4).

One is the Newtonian-Cartesian idea of separation and fragmentation that entails an understanding of the world as dead matter, and the other one is a Darwinian theory of competition, and the two together have led to an intellectual foundation for the industrial agriculture as a system of production and of control of nature. A narrative that discounts the knowledge of farmers, biological and ecological stories of a life that evolves through collaboration and contamination (Shiva 2016a). This specific case of closing an exchange of food waste due to the theoretical risk of contamination envisions a clash of stories – stories as rationalisations. Stories that are apocalyptic, that like the theoretical risk of contamination seem to “crystallise and naturalise certain modes of understanding the world” (Mikulak 2013:37). The potential risk of contamination is indeed real, as contamination is essential to life (bio and social), but not only do the apocalyptic stories of infection blur and block practices and responses like those of Hegnsholt Farm and the restaurants involved, they also block Hegnsholt and the restaurants from responding to environmental change and immediately shut down the possibilities of germination.

Listening to, following and writing out stories like Hegnsholt's is about suggesting how 'reality' could be different and this in itself can endorse a mobilisation of the cultural imagination (Abbott 2007; Denzin 2001; Le Guin 1986). I believe that the transformative gestures of stories lie in their ability to actualise the nuances of our acknowledged norms and realities, and therefore hold the potential to enhance cultural imagination and ideas for other realities and orders (Fjalland 2018b). Again, the risks of contamination are real, but the practices of Hegnsholt are just as real and just as possible. I wanted to understand how their response-abilities, their practices and stories seemed to practice a kind of mundane, peaceful and slow kind of activism – something that contrasts the immediate idea of activism as something more abrupt and volatile. This is not to diminish that the media debates and the experiences of the closure and blocks along the way have been intense and with economic and personal consequences. The storied food as that of Hegnsholt holds transformative gestures for response-able futures, and as Sarah Pink argues "It is through a theory of practice and place that we can comprehend the material, social, sensory and mediated environments of which everyday life, activism and thus processes through which sustainability might be achieved, all from a part." (Pink 2012:13).

In this chapter I have briefly touched upon this, but in the following chapter, I will address the practices in relation to discussions of place-making and a sense of place – both in relation to the movement of food waste between urban-rural landscapes and involving taste, eating and bodies as places that hold powerful relations to the transformation of landscapes in the rural regions where the food grows. In relation to the response-able practices discussed within this chapter, Mathews (2011) further argues for understanding knowledge as practice and performance (2011:14), as theories of this kind of knowledge "help us think of the remaking of humanness and highlight how making natures produces new subjectivities, refusing to make state-imposed identities the most important or only story to tell." (Mathews 2011:26). Observing food waste seems central to our response-ability-

es as it makes us notice that humans and non-humans are in this together, related, and there are some things and 'some ones' beyond the human realm of our common living worlds. Food waste connects kitchens with animals and animals with kitchens, and in the next chapter, I will go further into food waste as an important matter that connects the urban and rural landscapes. Food waste carries collaboration and ecological contamination that is essential for the human and non-human quality of life, as food waste helps to resituate human actions in ecological circles by using these residuals in ecological processes, and it resituates non-humans in ethical terms in relation to Hegnsholt's views on the importance of feed to the non-human quality of life.

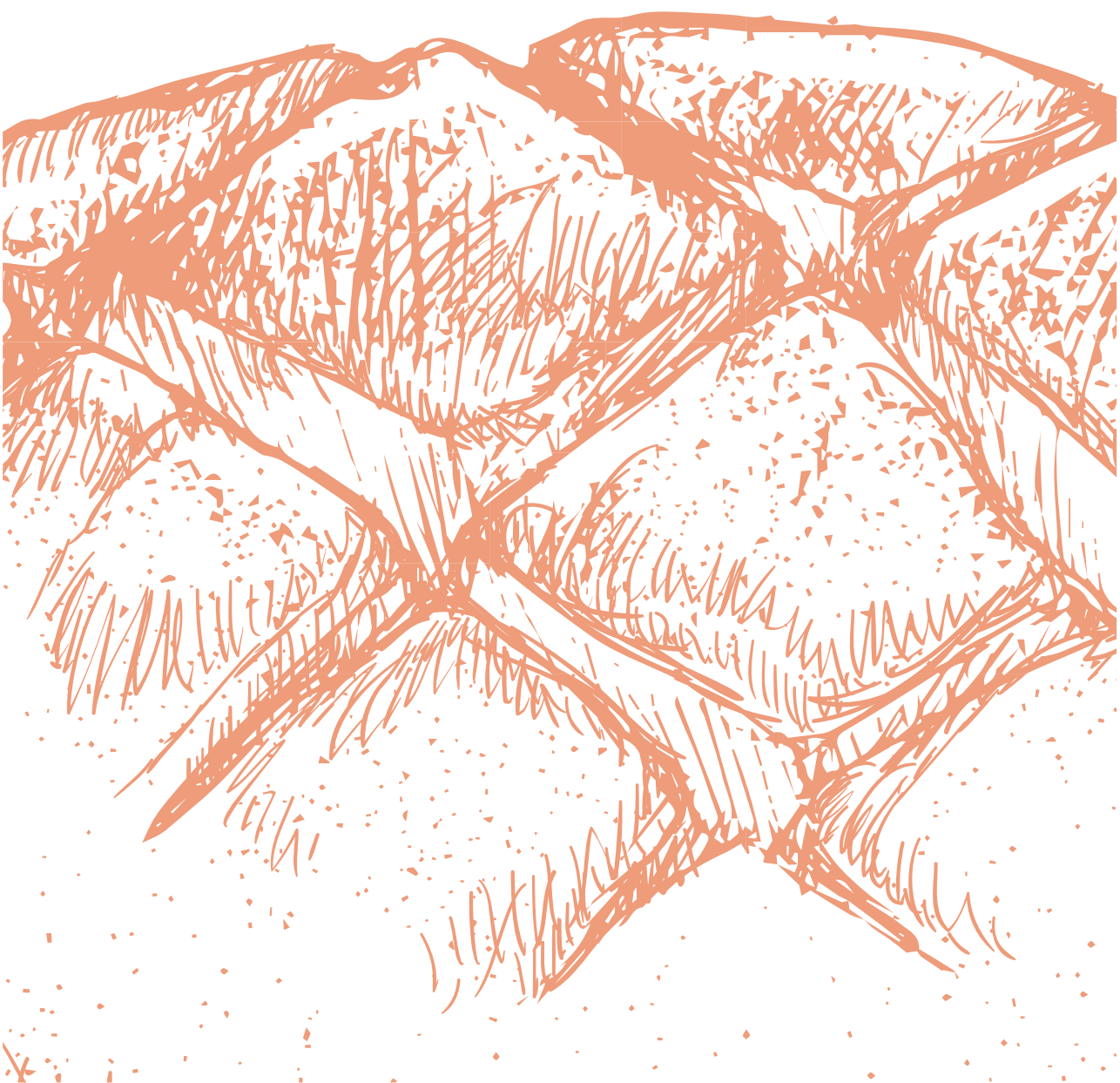
Trying to find some vigour along a diseased high-tech tale about food waste is about telling the stories of becomings, mutations, connections and collaborations - of the germinating possibilities. In the end, and despite anthropogenic attempts of taming, this happens anyway. Le Guin (1982) suggests a kind of utopian thinking that might be helpful here, because her suggestion is not one of progress, mechanical "futurity" and stasis, but rather about "persevering in one's existence as a completely worthy social goal" (1982:94), about organism, interactive, rhythmic, processual, able to live without destroying itself, preserving life. Fermentation is a microbiological process that is constantly happening around us, whether we want it or not. It is the ecological world's main process for transforming organic material (composting). Nature will find its own way. Mindsets also need to ferment, but despite the current sense of urgency, this process seems slow.

This kind of fermentation should not be stored or left alone to mature but requires careful attention. Making sourdough bread is a cultivated practice of fermentation and in relation to fermenting mindsets, changing the kind of top-down, disembodied knowledge, it can be argued that "sourdough is an act of responsibility; you must care for the yeast, tend to it, and feed it like an animal or plant. It is an act of love, of symbiosis." (Mikulak 2013:162). It is a dual argument as transforming mindsets about food waste requires both careful attention to authori-

tative practices and logic in relation to the matter of food waste, they should not be left unattended, but it is also about getting engaged with food waste on its own terms. "Sourdough takes skills and patience and a willingness to engage with the bread on its own terms. It takes embodied knowledge that is learned in situ." (Mikulak 2013:76). Fermentation is about getting engaged with the relationality between humans, plants, microbes and atmospheric elements, it is the culmination of time, place and culture. From this perspective, it is about confronting a mode of existence that is situated in relation to specific environmental, material, sensory, social and discursive configurations. Fermenting sterile desires is about questioning what should be preserved and cultivated from the sterile desires and this approach to the sterile desires, is about finding vigour along the diseased high-tech tale. I find it appropriate to close this chapter with a quote by Le Guin (1982:85):

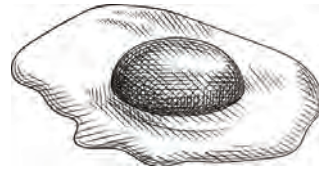
I am not proposing a return to Stone Age. My intent is not reactionary, nor even conservative, but simply subversive. It seems that the utopian imagination is trapped, like capitalism, industrialism and the human population, in a one-way future consisting only on growth. All I'm trying to do is figure out how to put that pig on the tracks.





6. Tasting landscapes





In this final chapter, I will explore how urban-rural relations can be rethought reparatively through taste and pleasure and the movements of food and food waste. These are aspects that have emerged out of the empirical experiences with Hegnsholt Farm and Lejre Municipality through the perspective of Tina Unger. One of the first things I heard about Hegnsholt was that the eggs had a significantly better taste as the chickens were fed with food waste; they were so good that acknowledged restaurants purchased them. This sparked my curiosity as there seemed to be an exciting tension between an immediate impression of a pleasurable taste and a rather repulsive smell of waste. Taste, especially in relation to ‘acknowledged eateries and restaurant’, might bring connotations to the bourgeois, and I will work and walk with this tension (in the Carrier Bag) to explore the transformative gestures of tasting and eating food and cultivating reparative and response-able practices. I will focus on the pleasures and enchantments of eating and tasting and explore how these affective practices could draw us into more-than-human worlds. Placing pleasure and enchantment in the Carrier Bag (that now contains risks,

contamination, fermentation, and collaboration) is about exploring embodied and affective experiences rather than a moralising, rational, instrumental information about eating sustainably and healthier.

I want to explore how we can start to crave chickens and eggs (from Hegnsholt) rather than the “chicken nuggets” that was presented in chapter 3 ‘Humanimal relations’. This might sound judgmental at first, but this is by far my intention. This is not to moralise *those* eating chicken nuggets, but to continue a critique of the negative ecological, biosocial and health consequences of current food production unfolded in chapter 3 and 4. I am exploring how the sensory and relational connectors such as sight, smell, listening, taste, touch, and talking about materials and matters such as food, waste, and germinating ecologies, might also hold transformative gestures while taking into account structural aspects of economic and social accessibility. I write gestures to stress the possibility of transition; gestures, which invite the ability to respond to environmental change profoundly different to the apocalyptic information or rational judgements. With this chapter, I will suggest that situated and sensuous experiences expand the notion of the ecology of life and the biosphere that feeds us and that those engagements seek to reconnect people, production, non-humans, urbanities, ruralities, natures, and cultures (Fjalland 2018a).

This chapter is named ‘Tasting’ to stress the active, affective and sensuous aspects of the vital and practical act of eating. By placing this word in front of ‘landscapes’ I want to depict the biocultural entanglement of tasting; we always taste *something* and tasting require collaboration and embodiment with something/someone else. Moreover, it is about depicting that taste reflects the landscapes from which food is grown in a biocultural collaboration. Thinking of landscapes as cultural, biological, ecological, temporal, and aesthetical spaces and processes also introduces an understanding of place as becomings and always relational (Ingold 1993, 2007; Massey 2005). With the empirical material, I question how food waste and the foods themselves matter in relation to connecting the urbanities of eaters and rural landscapes

that feed us. Urbanites also exist in rural regions and refer more to a kind of mindset and lifestyle (Willerslev 2010) that is disconnected or alienated from food production and systems despite having a poultry farm in their backyard. The food, waste, bacteria and ideas of contamination in the Carrier Bag of this study has created tensions with spatial thoughts on territories and borders, urban and rural, stable and field. They have challenged the idea of cities (small to mega) as enclosed islands, and Tina Unger first used the word 'landscapes' to communicate her views on places. I decided to take up and elaborate this thinking with the geographer Doreen Massey (1994, 2005) and the anthropologist Tim Ingold (1993, 2007), who think of places as open, temporal, relational, historical, material, something becoming, and porous.

The thinking of places as landscapes, in this study, is also about moving the spatial imagination away from a mapped or grid-ish or linear one, and I hope to blur the borders between the urban-rural with this imaging of a landscape. The landscapes are constituted as a continuing collection of past human and non-humans lives and works that have dwelt and dwell, moved through and still move, within them. Each have their own temporality and some leave long-lasting "traces", others ferment and with time become invisible as they are transformed into something else. Therefore, the landscapes, as I work with the concept here, are not static, not objects and neither particularly romantic. Walking with landscapes and tasting in our Carrier Bag is about exploring the affective and embodied aspects of human-nonhuman terraforming¹.

Massey (1994) argues that 'localities are produced in the nexus of global and local practices – "constructed out of a particular constellation of social relations, meeting and weaving together a particular locus" (Massey 1994:154), and in her book 'For Space' (2005), she suggests to understand "places not as points or areas on maps, but as integrations

1) Terraforming is about Earth-shaping, a literary word from speculative and science fiction, that often is used to think about how a planet (or any other spatial flying object) could be habitable (socially, politically, ecologically, atmospherically). In some science fiction, terraforming is a very engineering practice, whereas in others, such as Le Guin's work, I find it a playful ecological thinking practice that I try to think with.

of space and time; as *spatio-temporal events*.” (Massey 2005:130). She consents that “we use places to situate ourselves, to convince ourselves that between the celebration of cultural flow and mixity and the nervousness is a natural world that will not stay still” (2005:131). This is a dynamic and interrelational understanding of places that I would argue is fruitful in order for us to understand our ability to respond to environmental change. Ingold describes how “the landscape is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them.” (Ingold 1993:156). Studying how food and waste move introduced another understanding of place by revealing complex landscapes between local and global, urban and rural, human and non-human, but also the temporalities and different ‘speeds’ of the landscape (transformations). The chapter draws on material from interviews with Tina from the Municipality of Lejre and Johanne from Hegnsholt Farm specifically, and on fieldnotes from participatory observations during the Sharing City Project.

As eating and wasting are vital parts of human life, it has been impossible to leave the laboratory out of the everyday life, and this chapter also involves notes on embodied experiences with foraging, cooking, gardening, and composting. Mikaluk depicts that “somehow the topic demands it – you cannot read about fresh-baked sourdough or the fecundity of a garden in the summer, or the pedagogical impact of school gardens without, in some measure, transforming your own life.” (Mikulak 2013:135). The (field)notes are ‘prototypes’ (as I discussed in chapter 2) made out of these engagements, observations, and experiences, and I actively use them in this text to write out the going into the foodshed and the ecology of life that also feeds us.

Our engagement with the worlds around us, human and non-human, is affective and full of moods and emotions and these are essential in understanding how to work with transformative gestures of food and eating. Moods are fundamental human qualities that are situated and contextual reflections of our surroundings, related to prac-

tice, our way of life and social situation (Simonsen 2005:66). Emotions work primarily on a pre-reflexive level and are a way of relating to and interacting with the surrounding world (with the social, temporal and spatial), and understood as a bodily practice that expresses lived meaning. This is communicated and recorded through the historical and situated body's intentions and gestures that mutually connect one body to another (Koefoed and Simonsen 2010:48): we can feel our heartbeat when thinking about a person we have fallen in love with, we can feel our stomach ache when we are sad, get a cold sweat when nervous, we can see a look that signals desire and enjoyment or see a face that signals rejection and refusal. From this perspective, emotions are embedded in bodily systems and gestures, which unfold in the space between perception and gesture because lived meaning-making relates to the body's practice and experience (Koefoed and Simonsen 2010:48). The affective space is the space in which we are touched and related to the described situationality: this is where our feelings feel tangible and where we are in touch with our temporary spatial and social environment. I find this perspective not only relevant in relation to reflections about how researchers get engaged with the field, but also with the ideas about transformative gestures, response-abilities and reparative terraforming.

Transformative gestures of tasting and taste

Throughout the research project, I have found a relation of taste that is found between the matter itself, the stories about it, the sensuous experiences of eating and those you might share a meal with. From the very beginning of this project, 'taste' has been an essential connector as it is the 'good' taste of chickens and eggs that make well-renowned restaurants buy them and cook them for their guests (Fjalland 2018a). Therefore, as mentioned and argued earlier, it is the waste feed that makes the eggs and chickens taste different from industrially produced chickens and eggs. In the chapter 'Humanimal relations' where we thought of chickens as companions in the food making, I highlighted

the following quote from Scott (2017) and this thinking is also most relevant when we consider how feed and environments are reflected in the taste of the chicken meat and the eggs: “thanks to their gut bacteria, they can digest plants that we cannot find and/or break down and can bring them back to us, as it were, in their “cooked” form as fat and protein, which we both crave and can digest” (Scott 2017:18). In March 2017, Hegnsholt Farm was forced to feed the chickens and hens pellets due to the outbreak of bird flu and the closure of the exchange agreements. Johanne commented that “now when the hens eat that to a greater extent, I can taste a difference in the eggs.” (interview, March 2017).

This waste food, due to its links to cultural degrading norms of waste, might also immediately bring forward some doubts of the wild and maybe also some disgust in the ears of a person eating mainly industrially controlled food. I do not write this with an undertone of supercilious, but rather to acknowledge the ‘fear of bacteria’ that permeates Western cultures, as I suggested in the chapter about ‘Fermenting sterile desires’ (Katz 2011; Mikulak 2013; Shiva 2016b). In my own experiments with fermentation – that is a practice and place between the fresh and the rotten – such as making sourdough, kombucha or sauerkraut, I myself had to overcome these doubts (fieldnotes, June 2018). Recent food trends even argue that these foods are good for us as they are full of probiotics – the bacteria that is good for our intestines. Furthermore, the making of this kind of food is also perceived as an everyday activist act against industrial methods and taking back skills (Katz 2011; Mikulak 2013). Feeding chickens and hens with food waste is also an activist act, and as Mikulak argues that “industrial methods always prefer domesticated over wild forms, as they are more predictable and easier to control, having been disciplined to clock time. But like my garden, the wilderness gives it vigour and flavour.” (Mikulak 2013:162). In this sense, I follow up on the ideas about the wild and fermenting from the previous chapter ‘Fermenting Sterile Desires’.


Mikulak (2013), Carolan (2011) and Mol (Harbers, Mol, and Stollmeyer 2002; Heuts and Mol 2013; 2009) among others, argue that in

order for food to hold (environmentally and health-wise) transformative gestures it has to *taste* good. It should be delicious and pleasurable and make us crave kale and root vegetables. These vegetables have gained a renewed prominent place with the so-called new Nordic food tale, as a locavore and healthy food diet (Boyhus 1996; Meinecke 2013). Around the year 1800, the bourgeoisie condescendingly regarded kale and root vegetables as peasant and poor people's food, and in the 1960s, they were (also rather condescendingly) connected with 'grandma-food' and part of the rural and domestic life that many women had just left (Just and Strand 2012). Since around 2000, these vegetables have become part of the ethical production philosophy and health discourse that are essential ideological aspects of New Nordic food, a thought-(and practice-)led manifesto written in 2004². Trendy chefs included the traditional vegetables in a new story about authenticity and modern life, and, according to Just and Stand (2012:43, own translation), "many innovative, gastronomic initiatives have given the traditional vegetables a renaissance."

I mention the cultural-historical analysis of these vegetables as this thinking is essential within the 'storied food' that I am focusing on in this chapter. Furthermore, Hegnsholt's produce is also connected to this New Nordic food, production and culture entanglement. Considering the biosphere and health issues of the current global food consume, I need to add an ethical 'good' to 'tasting' because it is crucial to discuss the ethical, biosocial, and political aspects of taste, and following how taste preferences can change. If it is acknowledged that taste matters, taste also hold environmental transformative gestures, and we might be able to question what an ecologically (not to confuse with organic) response-able and reparative food chain would *taste* like. I have placed two culinary Instagram pictures, the first of a chicken and the second of an egg from Hegnsholt Farm, to present visuals of food aesthetics and how the two chefs (and Johanne) are storying the food and the farmer-chef, urban-rural collaboration.

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2) Link to the website: <https://www.norden.org/da/information/nordisk-kokkenmanifest>



 chrifrapug • Følger

chrifrapug 100 day life. 3 day brine. 2 day drying. A bit of cooking and a couple of days of pleasure enjoying it. @hegsholt chic is beyond organic and pretty damn good. 🍗🍗🍗🍗🍗
#organicandbeyond #homecooking

Vis alle 8 kommentarer

chrifrapug @venterol just leave it uncovered in the fridge. Could have been stretched longer

chefalex Brine at 3%?

chrifrapug @chefalex yassss

aa3k 🍗🍗🍗

♥️ 💬 ↗️ 📌

558 Synes godt om

21. NOVEMBER 2017

Tilføj en kommentar ...

A whole chicken that used to live at Hegnsholt. Screenshot from Christian's Instagram profile



 hegsholt • Følger

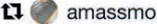
hegsholt Lucky #hegsholt eggs on the menu at @amassrestaurant
bokeslundsgarden 🍗🍗🍗

♥️ 💬 ↗️ 📌

66 Synes godt om

24. MAJ 2017

Tilføj en kommentar ...

 amassimo

An egg from a hen at Hegnsholt used in a dish. Screenshot from Hegnsholt's Instagram profile

An egg is not just an egg

Hegnsholt began with a project of lending chickens to kindergartens and elderly people's homes to enact human-animal relations, but Johanne changed focus and transformed Hegnsholt into an agricultural organisation to:

“inspire and explore alternative agricultural practices and thereby push another direction with greater attention to animal welfare and taste; to learn and teach that an egg is not just an egg; that a chicken is not just a chicken. [...] It is about increasing our critical awareness of what we consume and setting new standards.” (Johanne, interview, March 2017)

As a response to the story about the consumer encounter with supermarket chickens that I presented in ‘Humanimal relations’, Johanne is telling a different story of what food production could be and to connect consumers with the animals, farmers and landscapes that made the food possible; that eating is terraforming (my words). Hegnsholt's stories focus on biodiversity, handcraft, compassion, and the small-scale. And, she states that matters matter: how the chickens lived, the environments and what they lived on, leave material traces in the eggs and chicken meat – it leaves nutritional traces, visual traces, and traces in taste and texture. To a great extent, Hegnsholt's practices are about arguing against the intense commodification of chickens that it finds in industrial poultry farming sold in supermarkets. In her communication and stories on social media and the animal practices at Hegnsholt Farm, Johanne seeks to resituate chickens in ethical terms, and following her work has made me stumble over how little I knew about the things that keep us alive, healthy and living well. Like other researchers doing fieldwork in foreign fields, and as you can read in the following fieldnotes, getting engaged with food and animals has been like learning a new language:

I am on the train back to the university after a meeting with Tina from Lejre Municipality. I am wondering about those eggs. Tina said that they were so good that a food critic had highlighted them in a

review of an eatery called Manfreds. I know that the colour of the yolk reflects what the chickens have eaten; the more yellow, the more time they have spent outside, or something like that. But taste differently? (fieldnotes, February 2015)

While this was a terrain rather close to where I live (40 kilometres outside of Copenhagen) it was still foreign. While eating and wasting are vital parts of human life, the matters we eat and their historicity, political and ethical entanglements and relations have been foreign. According to Giddens, food production has become part of an abstract system and abstract systems deskill people in all the aspects of social life that they affect (1991). The deskilling manifests in an inability to recognise vegetables, fruits, plants, and animals in their unprocessed form, it is unknown where and how they grow and live, and also basic home-cooking skills disappear (Jeppesen et al. 2017; Tsalis, Mørk, and Bech-Larsen 2015). Mikulak describes supermarkets as “one link in an anonymous, placeless food chain that provides the consumer with out-of-season fruits and vegetables, and limitless packaged and frozen foods containing hundreds of ingredients, many of which can hardly be considered food-like” (2013:85). This deskilling happens as the consumption of processed, ready-made food, also called ‘convenience-food’, from supermarkets’ or takeaway places increases (globally and locally).

As a related point, in the Western world, we seem to eat out, away from our home, in restaurants and eateries more often and, furthermore, eating has become a sideline occupation - while driving, commuting, working or watching TV. Denmark has a rather high degree of home cooking (55% (Madkulturen 2015)), but reports also conclude that skills are decreasing and that meals increasingly consist of partly ready-made foods (Madkulturen 2015; Stamer, Thorsen, and Jakobsen 2017). The Danish Centre For Food And Agriculture (Aarhus University, DK) annually outlines people’s understanding of food quality and their 2015 report concluded that consumers “eat alone more often as well as eating simpler and ready-made food that requires fewer resources and time to prepare/cook” (Madkulturen 2015:46, own trans-

lation). The chickens and the eggs from Hegnsholt Farm are considerably more expensive, which clearly excludes groups of society, and, as discussed in earlier chapters, the question of affordability and accessibility has been a recurring concern of mine. The food krone (or dollar) is a rather speculative matter, and according to Hegnsholt and others, we should question why certain food is so cheap, its sociale and ecological consequences, and who is actually making money from it instead (cause it is not the animals, landscapes, farmers (Nielsen 2016; Shiva 2016b)). This might seem patronising, but to Hegnsholt, eating chicken and eggs should be an occasional and special event. But while the New Nordic food movement can appear elitist and exclusive, I also find their practice affordable as it places raw, local, seasonal and plant-based food on the table, even though preparing a meal from these foods requires cooking skills and time. To Johanne, and the New Nordic, a revaluation of *what* is valuable and why (ethics of biosocial production) is essential. Tina outlines three different aspects - ecological methods, small-scale farms, and what is on our plate - that contribute to this question of affordability and accessibility:

We are not in a situation today where we can guarantee that organic food can feed the world. Conversely, one can also say that the way agriculture is today won't feed the world either. It is not because there are too few foods produced but a question of distribution. And also, it is largely about malnutrition. Much of the food produced on a large scale is actually not very healthy for us. So, you could say that we are in a situation today that is not optimal, and, of course, no-one can guarantee that organic food can solve the problem. That is one thing, and another thing which I think is an important aspect of it is that 70% of the world's population gets food from small-scale farmers. One UN study after the next shows that using biological, ecological methods on these farms increases productivity and long-term sustainability. Using these methods, the soil can be cultivated for many, many years without exhausting it. You don't need an organic certificate, you just need to think ecologically in terms of diversity, in relation to the humus content of the earth, and all such things. And, that is also better in relation to drought problems etc. So, it is actually an important aspect to say that organic farming may not feed the whole world with the techniques we know today. Focusing on the small subsidies

of agriculture and ecological methods is actually a better way. Then, there is the whole meat discussion, and one reason why we cannot feed the world's population is also due to our meat consumption, and that more people want to eat more meat. And that isn't about being organic or not; that is about how we put this dish together. (interview, November 2017)

These kinds of exclusive, high-quality foods and home cooking skills are indeed surrounded by elitist and bourgeois cultural practices (Fuglsang and Stamer 2015) and uneven geographies of access, taste and class, but these are also much more and beyond an elitist project. With the beforementioned consumer-citizen in 'Humanimal relations', Mol (2009:279) contests that "in sociology 'good taste' has compellingly been staged as a move in bourgeois claims to social status" , for instance, such sociologic thinking as Bourdieu, who saw 'good taste' as an indicator of class distinction (1986). I am *not* bringing forward "high-quality products" nor "home cooking" to judge people's priorities and abilities nor to individualise the problem: there are several important economic, class and gender implications to home cooking and the accessibilities³ to e.g. organic, local and fresh food.

This is an important and large debate about distribution politics and there should definitely be a social fight for access to healthy, local and seasonal foods⁴. Furthermore, this is not to blame, for instance, performing

.....
3) Access both in term of economy (price), availability in shops or markets, and culturally as knowing the foods and how to cook them.

4) I am aware that this matter is highly contested and debated. In this context, I am not referring to any current diets as Raw, Paleo, or Locavore etc. This is rather a reference that a high-carbon producing fast food, ready-made, convenient-meal is, in general, more affordable than purchasing the "real" ingredients that would make up those meals. It is said that a McDonald's hamburger is cheaper than broccoli. Calculations show that local (regional), seasonal and ecologically produced foods would be more affordable if it wasn't for the industrial, capitalist paradigm defining food politics, prices and distribution (Shiva 2016a, 2016b), and the need to be accessible in markets and shops. In this question, it could be worth tracking down the constructions of the food coin, and map who earns what on what, when and where. My readings on this in the current system show that it's not the farmers who earn the most, they are mostly in dept, but middlemen like the wholesalers and supermarkets (Hansen 2016; Nielsen 2016; Shiva 2016b). But this is for a different study.

mothering⁵ (Halkier 2016), parenthood and the manifold interpretations of “good” life through food is burdened with normative expectations (Fuglsang and Stamer 2015; Leer and Povlsen 2016a for an overview).

The circumstances are that in current modern, Danish everyday life, home cooking is decreasing across different social classes, and several services (both cheap and luxury) have addressed this by making it easier and more convenient *not* to cook from ‘scratch’ and this has an effect on the supply in the supermarkets. “There is a sense that capitalism has colonised eating, degrading it from its original contexts of home and hearth and source of culture, to something more vulgar and utilitarian” (Mikulak 2013:113). Furthermore, due to the industrialisation of agriculture and food production, the ever longer distances that food travels make the landscapes where food comes from invisible, food and waste have become mystified and abstract matters. Following this, my argument is that the loss of basic food knowledge and deskilling of home cooking practices are problematic for everyone because cooking is a mundane cultivation of embodied and affective human-nature relations. Everyone should have access to and afford fresh and healthy food (Carolan 2011; Katz 2012; Mikulak 2013).

I will depict that this is exactly what Hegnsholt Farm values and practice as they use food waste from well-known eateries and restaurants as feed for the animals, and those specific restaurants and eateries who purchase the chicken meat and eggs (because they taste better), and, finally, as Johanne explicitly works on building this relation by talking and inviting the chefs into the rural and agricultural practices. This process of becoming aware of how our lives connect with the biosphere through the gastronomic axis; an axis that connects the table with the farm, the dish with the multiple landscapes where the ingredients have grown and been moved through (Mikulak 2013). Getting involved in this axis also involves going into the foodshed – because this involves

.....
5) I highlight ‘the mother’ because it is still mainly mothers who cook at home (74% according to (Madkulturen 2015)) and because of a cultural and historical (and biological in terms of breastfeeding) relation between motherhood and food.

imagining the future of those growing urban-rural landscapes (Kloppenburger, Hendrickson, and Stevenson 1996; Mikulak 2013; Rose 2017).

Thinking about pleasures and response-abilities

As a commodity – as ingredients, meals, and recipes – food travels globally, but as Gibson also notes, food also travels through our bodies as “food involves the proximate senses of taste and touch because food is incorporated into the body through the act of eating. The mobility of food into the body involves its passage through the mouth and through the body” (2007:5). In order to get attuned to:

for instance, good food, in order to learn to taste it and appreciate it, a person needs the collaboration of such food. An eater may only develop a ‘good taste’ if she has access to food that ‘tastes good’. I might say that overall appreciation only increases if, somehow, eater and food are well co-ordinated (Mol 2010:265).

Acknowledging the relation between feed and food, between the food waste and eggs from Hegnsholt, is about acknowledging that matter *matters*. Tina from Lejre Municipality also highlights the significance of the sensuous experience and expectations of the taste and texture of the food we eat and describes the material relationality of this practice as ‘life-quality’:

The producers, in the early days of organic farming [referring to the 1960s and 70s], were mainly driven by [environmental] concern. Above all, it was about doing something and it wasn’t the be-all and end-all if the carrots were a bit soft in the shop. If there wasn’t much life-quality in them. Today, they simply have to be organic, but they also have to be delicious; they shall crackle and give us something... (Tina, November 2017)

This can be further expressed by the two different ways of eating mangoes – *chupar* and *comer* – because the two different ways of eating are defined by the mangos themselves. *Chupar* is Spanish for ‘to suck’ and *comer* is Spanish for ‘to eat’, and when you have tried eating (*chupar*) a small ripe mango where the juice drips down your

chin, fingers and arms, you know it is very different from eating (comer) a hard mango (van de Port and Mol 2015). Think about an experience of eating something and you might recall the shifting between the seeing, smelling, tasting, and evaluating as ongoing and entangled. The material itself infuses it all – you cannot take the matter out of or away from the experience (Barad 2003; Bennett 2010). Learning to appreciate ‘great taste’ depends on a body that is able to taste it. According to Mol (Mol 2009), this ability does not come naturally and only improves with practice. Taste does not just happen impulsively on the tongue, but as Mol (2009) argues:

talking provides everyone with linguistic repertoires that help to refine their ability to differentiate between tastes. Thus the tasting body is socially embedded and, whatever its age, may learn from others. But it does not just learn from others, but also from what it eats and drinks. It is only by eating and stuff that tastes remarkable good, that a body learns to remark such tastes and to appreciate them. (Mol 2009:278)

Therefore, the eggs, chickens, and the kale must all taste remarkably good, but we will only learn this through sharing a meal with someone who knows and can teach us, or through stories from TV, social media or magazine articles if the stories are recognised as holding transformative powers (Fjalland 2018b; Mikulak 2013; Mol 2009). Earlier, I described how eating, to a great extent, has become a sideline activity and how this affects our attention, experience and knowledge about what we eat. Within the current and even more mobile cultures on eating (Gibson 2007), our ability to recognise, sense and taste flavour nuances and textures is decreasing. Therefore, a place to begin the transformation could also start with being conscious about eating itself - making eating a core activity – and to slowly grow awareness of what we eat (Carolan 2011; Mikulak 2013).

What should we do when we crave those earlier mentioned chicken nuggets, the caged eggs or the textures and taste of barded chicken breasts pumped up with water? In understanding food preferences and

pleasures, not as static or determined, but as relational and constructive, our bodies and preferences become “tuned” according to what we eat; “‘tuned’ into industrial flavours and textures, and that we learn to recognise those flavours and textures as good and pleasurable” (Mikulak 2013:8). Taste is not simply rooted in a “pre-social body driven by impulse and desire” (Carolan 2011:19), but also originates from outside the body, and emphasises a certain view of knowledge that argues that practice is inseparable from knowing. Therefore, an important question to pose in relation to the taste of the chickens and eggs coming from Hegnsholt Farm, is not only whether eaters will be able to recognise the difference, but also if they will like it? The first time I tasted a chicken from Hegnsholt Farm, I experienced the texture as much tougher but also much juicier, and I found the taste “new” (fieldnotes, May 2017). I also found that the eggs from Hegnsholt tasted sweeter than usual and there was a significantly intense eggy flavour (fieldnotes, March 2016). I can imagine that the difference in taste would be more dramatic if a person who mainly eats chicken nuggets would eat the meat of a slowly simmered whole chicken. In my own experience from being used to the whole chickens from the Supermarket, the first time I tasted one of Hegnsholt’s chickens it was much ‘meatier’ and the texture required more of your jaw strength. The meat was not tough, but my lack of words to describe this taste experience reflects my own immature taste vocabulary, which needs more exercise to become more alert and critical and to grow and cultivate the nuances and cravings of taste.

As I used Mikulak in the introduction of chapter 1, I will argue that eating chickens and eggs from a farm like Hegnsholt as a kind of “good eating” becomes an act of “negotiating alternative value practices to capitalism” (Mikulak 2013:135). The embodied experiences of food are essential for the transformative gesture of food. Carolan writes that it is not only “about knowing *differently*; knowing *thorough* relations” (Carolan 2011:14). Like many others, I too have been caught up in the convincing narrative of numbers of actual costs and finding statistics. But I found that this was just adding to a rationalist convincing narrative while I empirically was about the situated,

embodied knowledge practices that cultivate transformation and response-abilities. It is exactly by learning to know through relation, as Carolan puts it, it about getting involved with mess. Following this thinking of transformation with 'desire', Carolan (2011:20) also writes that: "We need to make people *want* an alternative. Simply knowing about the problems associated with the current system is not enough to change behaviour and elicit collective mobilisation". It is about eating and sensing the matters themselves, as they can draw us into the worlds of nature-cultures and humanimal relations. Barad argues:

in an important sense, in a breathtakingly intimate sense, touching, sensing, is what matter does, or rather, what matter is: matter is condensations of response-ability. Touching is a matter of response. Each of "us" is constituted in response-ability. Each of "us" is constituted as responsible for the other, as the other. (Barad 2012:215)

How storied food can reconnect the urbanities and ruralities

Hegnsholt's work seems to be among those new lives that emerge in those ruined landscapes, and Johanne's attempts to resituate human-animal relations within ethical terms and critically describe the life of the chickens at Hegnsholt farm responds to the current modern poultry industry. This is reflected in Hegnsholt's storytelling on different social media platforms such as Facebook and Instagram, where he describes and visualises the chickens, eggs and food waste, its farming methods and values, struggles with authorities and regulations, describing Johanne's choices and internal negotiations about what is best for the animals at Hegnsholt. It was Hegnsholt's Instagram profile (which I looked at before visiting the farm) that drew me to the politics of diversity and varieties in agroecology and to the critique and consequences of monocultural farming (Barber 2014; Ejrnæs 2016; Scott 2017; Shiva 2016a, 2016b).

The pictures of baskets with eggs of many colours, especially some green eggs that I had never seen before were decisive: "Easter. My In-



*A basket of eggs collected at Hegnsholt.
Screenshot of one of Hegnsholt's Instagram pictures.*

stagram feed is full of pictures of eggs in different colours coming from different breeds. This was new to me 3 years ago and now it is all over. It might be that the algorithm directs me to these pictures or are they just becoming more common?" (fieldnotes, March 2018). I thought only light brown and white chicken eggs existed. This is not a media analysis, but Hegnsholt's storytelling on social media has contributed with backgrounds and stories essential for this study, and Johanne's use of these digital places are also essential places for the collaborative eco-activism that Johanne takes part in and contributes to. Pink depicts how "it would be difficult to study contemporary everyday life, activism or sustainable agendas without understanding media as part of the places and practices with which they are involved" (2012:138–39).

I also want to add, that the activity of storytelling is essential for the transformative gestures of storied food. According to Mikulak (2013:3), storied food is a "genre of literature, film, and new media that attempts to 'reveal' the "truth" behind the veil of incomprehensible ingredient lists, transnational foodways, and genetically modi-

fied organisms, in order to trace the hidden worlds of agriculture.”. Hegnsholt’s (pictures of) storied food are small gestures of transformation that might spark curiosity and imagination for the many ecologies of eating, places, people, animals and practices that are part of the process. With a grounding in actual physical practices and places, of humans and non-human, this storytelling seeks to reconnect the urban with the rural. They are small gestures that can help transcend alienation, connect humans and non-humans through media, and create a place for those who support Hegnsholt’s work and activism. Johanne’s storytelling is done with the help of aesthetically beautiful pictures and captions that are mostly about what she does to provide what she considers is the best possible environment for the animals. This storytelling is different from much of the rather doom-like story styles of the storied food genre, such as ‘Food.inc’ (2008), ‘Chickens, Hugh and Tesco Too’ (2009), ‘Forks over Knives’ (2011), ‘Fed Up’ (2014), Cowspiracy (2014) or ‘Food Choices’ (2016).

These are informational and inspiring, but also overwhelming. I find Hegnsholt’s storytelling as glimpses of hope, as mundane everyday moments of enchantment with enabling and reachable aspects of reparative futures, and small insights into places of reparative and response-able practices. Johanne is not the only one with this style of storytelling, and there seems to be a whole Instagram community. On the next page, I present two screenshots of Instagram pictures from Signe Voltelen, a seed farmer saving heirloom varieties and architect growing urban farming communities, and Marie Hertz, a farm-based chef, gardener and writer. They both tell stories that I see as *mundane, slow activist enchantments*, which is how I best describe this genre. I have not come across a definition of the style, but Mikulak (2013:110–22) describes a genre which he names ‘utopian pastoralism’. He describes how this genre does more than just encourage green consumerism with affective pastoral imaginary, as their practices also involve co-productions and engagements in ways where “the authenticity becomes enmeshed in embodied forms of skills and pleasure.” (2013:121). These seem like small sites and practices, small invitations, of a response-ability that



signevoltelen • Følger

signevoltelen Beet it! And have a great weekend 🍀
 #giantbeet #organic #seeds
 #kitchengardenseeds #copenhagenseeds
 #noseedsnoparty #organicseeds
 #seedsaving #growseeds #seedbreeding
 #seedpropagation #frø #friefrø
 #seedfreedom
 #wedonotwantpatentsonseeds
 #nopatentsonnature #mothernature
 #biodiversity #dyrkdinby #biodiversitet
 #dyrkrø #seedswap #instagardeners
 #weloveseeds #seedsaving #farmofideas
 #heirlooms #kickstarter

Vis alle 18 kommentarer

signevoltelen @paramette.ic you too! I have fermented honey with roses for you when back in CPH.

paramette.ic @signevoltelen gonna

❤️ 💬 ↗️

458 Synes godt om

31. AUGUST

Tilføj en kommentar ...

A beetroot that got 458 likes. Screenshot from Signe Voltelen's Instagram profile.



mariehertz • Følger

mariehertz Hyld'r løg #hyldeblomst #elderflower #løg #onions

famriis Hvad laver du så her af de to lækre ting???

mariehertz @famriis jeg sylter rødlog i hyldeblomsteddike (lagereddike der har trukket med hyldeblomster et par dage) ganske simpelt - meget dejligt

famriis @mariehertz_ tak og det lyder da himmelsk 🍷

ghadbolandd افزایش قد ؛ تا ۱۰ سانت بعد از سن رشد بدون قرص و دارو و بدون عمل جراحی ۱۵۰ صد در صد تضمینی

❤️ 💬 ↗️

149 Synes godt om

6. JUNI

Tilføj en kommentar ...

Onions and elderflowers. Screenshot from Marie Hertz's Instagram profile

Tina described in the chapter 'Stories of the Sharing City'. I would not say that the stories are idealising, as they also mention, relate and respond critically to the ecological destructions and they also present dirty, bloody, painful and exhausting aspects of food production.

According to Mikulak, "storied food can help expand the notion of politics by developing the concept of *biosocial production*, a dialogic process of producing place through a self-conscious cultivation of situated, embodied knowledge." (Mikulak 2013:132). Central to Mikulak's argument is that it requires the 'consumers' to get involved with the matters themselves – to touch, feel, taste, smell, grow, harvest, cook – and despite that Hegnsholt host's farmers markets and farm visits, the 'embodied' practice is not central to Hegnsholt's work. It is difficult to taste, touch and smell the chickens, eggs and food waste through social media platforms, but sensuous and affective pictures invite attraction and engagement. Hegnsholt's storytelling and aesthetics spark a curiosity for food production and food systems and suggest getting engaged with food on ethical terms. Furthermore, Hegnsholt's digital platforms seem to gather people engaged with creating alternative agricultural practices, alternative human-animal relations, to industrial methods. Hegnsholt's digital places are not the only collective point, but part of activist networks of people with a common cause contributing on several platforms; it is a link or a point in a larger movement (Halkier 2016; Leer and Povlsen 2016b; Pink 2012).

I am not trying to neglect that stories like Hegnsholt's eggs and chickens might be translated by others and turned into media representations of food and foodways that "endorse and circulate mainstream values in service of neoliberalism" (LeBesco and Naccarato 2016:255); that these rather expensive eggs (compared to the industrially produced eggs) might constitute a privileged food discourse that is likely to both be subtly neoliberal and empowering at the same time (LeBesco and Naccarato 2016). This meaning that if or when the basket of eggs in various colours and sizes – that currently symbolises, materialises and stories 'diversity', 'small-scale', 'naturalness' and 'handcraft' – be-

comes part of the industrial logic and system, the food would probably not be as the story seeks to present. Just as how ramson became a symbol of 'foraging' and 'localism' but seems to lose these qualities when it is processed into 'ramson dip' and exported to China, still marketed with the stories of New Nordic 'naturalness', 'localism' and 'foraging'.

Experience and history show that it might be unavoidable that industries start using 'localism', 'authenticity', 'diversity' and 'handcraft' as food trends and turn them into industrial products still marketed with the 'other' story. Yet, this might affect and dilute stories about Hegnsholt's products but not the actual products or practices themselves. While it can be argued that Hegnsholt's storytelling is part of a 'New Nordic kitchen tale' that attracts an audience, Johanne constantly tries to make the issues of food chains, food security, and animal welfare visible, and thereby seeks to argue against industrial methods. Pink depicts that to understand the current activism around sustainability, digital dimensions of place need to be incorporated, and this is not simply a matter of online and offline contexts, but rather "the cross-platform nature of digital practices and places" (2012:139). These mediated processes and digital contexts are places for (global-)local activism and should be conceived as "inevitable elements of everyday life, and are as such inextricable from the practices and places where sustainability might be both lived and experienced and campaigned for" (2012:139).

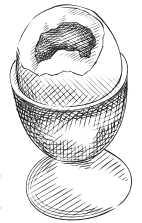
The transformative gestures of Hegnsholt's storytelling and promotion of humanimal relations are central to my argument. According to Jane Bennett, enchantment becalms and intensifies perception, unlike overwhelming fear that shuts you down (Bennett 2001:5). Bennett argues against the story of modern life as being disenchanting, a place of dearth and alienation, saying that this story "discourages affective attachment to that world" (2001:1) and further explores how the "affective forces of those [enchanted] moments might be deployed to propel ethical generosity." (2001:1). I have been alerted to stories "uncovering" different foods but they often have a tone of conspiracy and too many dramatic effects. Despite my profound sympathy for

the cause of the documentaries, I more often than not have to turn them off because seeing clips of emaciated, ruffled chickens crammed together in huge halls with no daylight is far too repulsive and paralyzing. In a much less repulsive sense, getting involved with Hegnsholt have made me look into the politics, cultures and history of the chickens and eggs. I will argue that the storied food, as well as the produce and practices of Hegnsholt, have the potential to release moments of enchantment and that these 'gestures' seem to be more activist, more response-able, than the apocalyptic alarmism central to many environmental debates (Fjalland 2018a). Furthermore, Mikulak argues that one of the most important aspects of enchantment (and embodiment) is "the way in which it opens up time and space for alternative value practices and utopian thinking to germinate." (Mikulak 2013:23). I will argue that the storied food of Hegnsholt and the mundane moments of enchantment help us "crave a different world" as Mikulak (2013:77) so appetisingly puts it. Storied chickens and eggs from Hegnsholt "draws on sensual experiences and celebrates taste, touch, and the ephemeral can help situate bodies in place and enchant, alongside darker apocalyptic discourses." (Mikulak 2013:77).

Invisible vital mobilities

- Sensing places and more-than-human worlds

From these arguments about how matter matters, how taste matters and how storied food holds transformative gestures, comes the story of the urban-rural relation of the chickens and eggs, and I will now turn to another aspect of food waste. In the past it was common that a city's waste was collected, sorted and brought to the countryside to compost and feed the soils and animals (Sennett 1994; Steel 2008). In that sense, and however smelly and dirty it amounts of waste in the urban streets must have been, the connection to the rural regions was clearer. The wish to feed Hegnsholt's chickens with food waste from Copenhagen restaurants makes those relations clearer again, in a time where the mobilities of food and waste are largely invisible and impersonal, hidden in a large-scale system, just as the mo-



bilities of energies that are important for life, such as water, electricity, and the sewage system. These flows of energies (and shit) are related to our culture, lifestyle and environmental pressure, and it might be that the unawareness/detachment of where the food comes from, what makes it “grow”, how it was transported, the amount of waste we produce, where it is taken, of all of this is impersonalised. Could some response-abilities come from getting bodily experienced with some of these energies? Could we get reconnected and reskilled with the elements that keep us alive, and would that enable us to respond? Would a re-enchantment and embodiment open up the time and space for alternative practices and imagination for how life could be different? Could these small gestures be a micro-utopian practice?

While I was preparing for a debate about sustainable futures during the Copenhagen Architecture Festival 2018, I began to wonder about the relation between invisibility, disenchantment and alienation (fieldnotes, May 2018). We were told to take a starting point in a documentary about a self-built house in Greenland (Bennetzen 2017), which was followed by a debate in relation to sustainable futures between another panel participant and myself. In this documentary, one of the residents conclude her description of their self-built dam (which supplies their electricity) with “it all becomes so personal”, and later on the host and speaker of the documentary describes the house as needing careful attention to function, as, amongst other things, 250 litre of water is filled into the water tank a day. How could an energy supply feel personal? As my fieldnote reveals, I had actually not considered my own family’s water consumption in detail, but what struck me more was the visibility of water consumption due to the size of the bottle and their sensuous experience of knowing the exact amount of water that they would have to manually fill up. We sat in front of a floor-to-ceiling window at the actual debate and cars were passing constantly below us. I reached to the constant moving flow of cars below as I was trying to argue why I found those observations interesting in relation to sustainability and tried to formulate the invisibility and alienation I could see in urban environ-

ments: “We see this”. Traffic takes up much space in urban planning and is a highly politically sensitive subject. It is also well documented how this is one of the few mobilities that urban citizens have an emotional and embodied experience with (Freudendal-Pedersen 2009; Sheller 2004) material and, above all, affective dimensions that are overlooked in current strategies to influence car-driving decisions. Car consumption is never simply about rational economic choices, but is as much about aesthetic, emotional and sensory responses to driving, as well as patterns of kinship, sociability, habitation and work. Through a close examination of the aesthetic and especially kinaesthetic dimensions of automobility, this article locates car cultures (and their associated feelings, as we drive cars and use bikes, walk on streets, commute in trams, and because traffic is visible, as we see the metal carriers, spaces they take up, creating long queues of idle cars, and the pollution – the car exhaust – was once a brownish grey.

Returning to planning theory, I used to be impressed by the 1900s and 1960s sanitation of the European cities, but I now review this a bit differently. I am not questioning that living conditions were unhealthy and even dangerous, I am wondering about the questions of invisibility. The functionalist movement in architecture and planning explicitly tried to make the functionalities and infrastructures visible, while also getting rid of ornamental noise and stripping architecture to its purest functional form, but it also looks a bit engineerical and reaches out for a machinic-instrumental experience that requires the wisdom of an engineer. Today’s vital infrastructures, such as electricity, water, sewage, waste management, and foodways, are to a great extent made to be invisible. Made invisible due to industrialisation, convenience, efficiency, health and security, and resulting in us, humans living in cities, suburbs and rural regions, having a poor understanding of these infrastructures (Graham and Marvin 2001; Sennett 1994; Steel 2008; Vannini and Taggart 2015). Furthermore, their environmental, social, political, and economic consequences are to a great extent made to be invisible also. The stories of modernisation, industrialisation and capitalism in relation to food and waste are also stories of expropria-

tion, disconnection, detachment, and alienation (Haraway 2016; Haraway et al. 2016; Latour et al. 2018; Mikulak 2013; Steel 2008; Stengers 2015; Tsing 2015; Tsing et al. 2017; Vannini and Taggart 2015).

I am not trying to argue that every apartment should build its own dam or get its own 250 litres of water. I am rather questioning how the embodied experiences and situated knowledge of vital infrastructures could be translated into an urban environment. I am wondering what the consequences of invisible vital infrastructures and ecologies are, and in which ways visibility would prefigure this; how there seem to be strings connecting what we are able to notice and see with regards to enchantment, disenchant, alienation and compassion. The smell must be rather intense. In the documentary *The Human Scale* (Dalsgaard 2012), a planner in Bangalore, Khondker Neaz Rahman, expressed his concerns with the aesthetics of the build environment and the relations between what we see and how this infuses our imagination, stories and lifeworlds:

“As a species we have certain conditions of learning. A kid walking down the road and around the house: What does he see? He sees small trees growing, insects and small butterflies. If you see life. If you see how it grows. Then, when you grow up, you will take care of the lives of others. It is not school. It is not a book. It is the timeframe of your life, you learn.”

This is not what most urban environments look like and most playgrounds and parks do leave space and time to get the kind of embodied and sensuous experiences that Rahman describes. I highlight playgrounds in relation to children as it is my experience from Copenhagen that the places where Rahman’s suggested experiences could take place are at playgrounds and parks – public and private. Parks to a greater extent than playgrounds, but to my knowledge, most of the trees, flowers and plants on common playgrounds do not reach out for insects and butterflies in any significant way. Neither do they reach out for playful interaction with the kids. For instance, the tree ‘common box’ is often planted in playgrounds and parks and this

plant not only smells bad but is also poisonous, also, grounds are often made of sand, cement, lawn or a kind of bouncy rubber/plastic material that does not accommodate digging for earthworms or sow bugs. Of course, we can have playful and emotional interactions at the playground, but what I am interested in here are the biospheric encounters. What I encounter here in relation to the research question is that vital infrastructures, also including the biosphere and edible plants and bushes, vegetables, animals and water, are largely invisible in super designed anthropogenic cities. There is a chance that this will be read as rather romanticised notions of the vital infrastructures, and while I am aware of the smelly, unsanitary aspects of these, and, moreover, the incredible amount of space that these would take up, my attempt at raising these questions is about exploring the different possibilities in connecting humans with the vital infrastructures through embodied experiences rather than just 'smart-city-digital' encounters. This question has, amongst others, also emerged from the composting experiences in the courtyard of the housing co-operative where I used to live and the Municipalities of Copenhagen's new standards and practices of sorting waste. These experiences made our household waste production very visible and learning about what can go into a compost made me question all the stuff that could not go. For instance, the coating and pesticides used on non-organic lemons could kill essential compost bacteria and nutrients and should therefore not be used, and egg-shells could add calcium to the soil. These small, local, urban embodied experiences with compost brought my attention to the landscapes where the food grows and the larger politics of food production, which I then brought along as I shopped for a plan.

Enchantment of food, waste and places

My argument derives from knowledge that is cultivated through tactile, somatic, and a situated sensitivity or attention to local settings, individual and cultural desires. I believe that this kind of knowledge is crucial for addressing the environmental change because the experiences expand the notion of food and waste, food and waste produc-

tion, systems and -politics, and thereby also expand the notion of the ecology of life and the biosphere that feed us. I believe that the abilities to notice, see, smell, listen, taste, touch, talk about food and waste, and those related to engagement seek to reconnect people and production, urbanities and ruralities, and make us able to respond to the environmental change differently. The previous description of cities might make it sound as if they are full of dead matters, but of course, they are not. There is so much to get involved with, to sense and see. There is so much biodiverse sprouting life to experience in those abandoned, ruined places, in parks, backyards and courtyards, cemeteries, and even streets and passages, and community gardens are on the rise. The main difference between these kinds of public spaces and the private spaces, such as one's private garden, vegetable patch, or domestic plants is that there is a limit to how much you can get involved.

As mentioned, most public spaces are designed and cared for and mainly invite citizens and users to an observatory engagement, whereas abandoned places such as deserted buildings or undeveloped sites are more engaging (through semi-legal or temporary trespassing), and these sites are often more ecologically diverse as humans have not interfered too much. Two of the participating actors in the Sharing City Project was the Urban Harvest (in Danish 'Byhøst') platform and the Compost Messengers (in Danish 'Kompostbudene') and I followed their work during the Sharing City Project. While their organisations changed, I was unable to follow them further, but I initiated and built a compost at my former co-operative with the help of the Compost Messengers. I did not become a compost expert, but as I mentioned before, it gave me basic information on what could go into the compost and I learned to notice when it was too wet, too dry and when it was hungry, and I began to sense the difference between the smells. It drew my attention to matters of fermenting soil and it also became affective as I started to feel that it needed my care and attention. I also used the Urban Harvest app, which is a digital map of city places where you can find and forage edible plants, flowers and fruits, but mainly I looked at their Instagram profi-

le and followed other 'wild foragers' to get a sense of what was in season, and then me and my kids would go exploring on our walks.

The compost care and the watering and nursing of the plants in the backyard could be an expression of this, as care might not come directly from noticing, but learning to notice and then to relate, in a very practical sense, to develop a compassion and an attachment where I feel determined to assist the plants. The fieldnote observations about compost and soil also express this relation between noticing and caring. Learning to notice also has a kind of therapeutic aspect as you start noticing the living, growing and constantly mutating environments. To avoid navel-gazing reflections of how it has helped my own environmental concerns, I am using Bennett's writings on enchantment, and argue how these moments of enchantment spark our imagination and abilities to respond to environmental change with the help from other researchers. Mikulak argues that one of the most important aspects of enchantment and embodiment (which I understand as central aspects of 'noticing') is "the way in which it opens up time and space for alternative value practices and utopian thinking to germinate." (Mikulak 2013:23). Following Jane Bennett's question that opened this section, there must be a task to revive or enliven the story of the planet, not as dead, but as alive, and life full of enchantment. In her book 'The Enchantment of Modern Life: Attachments, Crossings and Ethics' (2001), Bennett argues against the story of modern life as being disenchanted, a place of dearth and alienation, and argues that this story "discourages affective attachment to that world" (2001:1), and she further explores how the "affective forces of those [enchanted] moments might be deployed to propel ethical generosity." (2001:1).

It might be dangerous to use the words 'revive', 'enliven' or even 're-enchant' because of the religious and mythical associations the words bring to mind, or that something is dead until it is revived. In lack of other words, I wish to use these to describe the feeling of surprise of the ordinary, of something that was there all along. These words also immediately bring along romantic associations and in relation to my field

of study – food and waste – pastoral and picturesque landscapes might appear. I do not wish to introduce another Romantic notion of nature ‘out there’, but rather wish to study the connections and relations, study all of the trouble, the living and dying, in this and among us (Haraway 2016). Bennett describes this as bringing attention to “the cultural practices that mark the marvellous erupting amid the everyday.” (2001:8). While keeping a world of inequality, racism, pollution, poverty, and



*My daughter studying
dandelions on the sidewalk*

*Screenshot from my
own Instagram profile*

violence in mind, I welcome the transformative and empowering gestures that moments of enchantment invite to, as these experiences cultivate knowledge production and critical consciousness through attention and affection. And while this is a task that is related to the perspective of the philosophy of science, it also refers to a very practical mode of being. What is there to love if we do not know what there is to love? Why get up in the morning? Studying our abilities to respond to environmental change through these lenses must require that we learn to notice, to listen, to sense, to smell, to taste. For this research project, it was essential to explore how sensitivity as attention and enchantment through embodied practices grow a greater consciousness about where we are right here, right now, and how this knowledge and experience production could inspire our response-abilities. In *The Perceptions of the Environment*, Ingold conveys a sentient ecology that “is based in feeling, consisting in the skills, sensitivities and orientations that have developed through long experience of conducting one’s life in a particular environment.” (2000:25), and being able to notice the particular environment, which we meet every day, brings new tactile experiences, sensuous moments and stories relating to the spaces we move through. Just as with the other experiences of urban wild foraging, I had a new experience as I tasted a kombucha made from dandelions by a friend. I thought dandelions were poisonous. The taste was surprisingly good – a little flower-soil-ish – but the experience was delicate and whenever I saw a dandelion after that experience, I remembered that moment of pleasurable surprise (fieldnotes, June 2018). Dandelions grow everywhere and are mainly considered as inedible weeds that are often cut or burned down, but after my experience and the knowledge that came from it, I feel a tinge of sadness seeing places being trimmed from dandelions.

My argument in this section is dual: by involving my own coming into the foodshed I argue for the value of an embodied, situated knowledge, and I seek to suggest this embodied knowledge as a way of acting for others. Altogether, this thinking and doing is an attempt to raise the ecological literacy and citizenry, awareness of global, capital issu-

es of food and waste, and it is an attempt to spur the imagination of alternatives by becoming sensitive and aware of the places we inhabit locally (Bennett 2001; Gibson-Graham 2014; Kloppenburg et al. 1996; Massey 2005; Pink 2012). The storied food and the storytelling about mundane, moments of enchantment of the food producers, seem to lead and enact a response-ability about learning to see and enjoying what is right here, right now; about noticing the environments and landscapes, non-humans, people, and practices that feed and nurture us. This leads me to a phrase in Le Guin's essay 'A Non-Euclidian View of California as a Cold Place to Be' (1982) that fundamentally changed my perspective and cemented an argument for the arts of noticing:

Despite all our self-consciousness, we have very little sense of where we live, where we are right here right now. If we did, we wouldn't mock it up the way we do. [...] If we did – if we really lived here, now, in this present – we might have some sense of our future as a people. We might know where the centre of the world is. (1982:85).



emmylaura

emmylaura Soon it will be season for elderflower, and lucky me. The rest of the two bottles of elderflower vinegar, I made last year, is running out. They still taste like early summer ☀️ #gathering



45 Synes godt om

21. FEBRUAR

Tilføj en kommentar ...



Screenshot from my own Instagram profile

Getting engaged

I believe that engagements with food, waste and those feeding us (human and more-than-human) can cultivate transformative gestures and support our response-abilities through affection, care and belonging. In this chapter, I have focused on the aspect of 'coming into the foodshed' as an alertness to learning to notice, to see, smell, listen, taste, touch, talk about food and waste, the non-humans and landscapes that feed us, and those affective and caring experiences that these engagements release. I have done my best with the language I am able to write out right here, right now, and I will keep developing the stories to describe these, but at the very core of my argument is that they can 'never live up' to the experiences themselves (Vannini 2015) and the stories you read will not stick as much as doing it yourself. It is like the difference between learning a recipe and learning a technique (Mikulak 2013). In my fieldnotes of compost, there is a reoccurring theme about slowly learning to notice, learning to observe the more-than-human surroundings in the landscapes of food and waste, and this noticing is related to enchantment, compassion and care.

While 'learning to notice' – directing our attention towards something specific, observing it carefully and building up knowledge from our observations – is an essential scientific ability. I will argue that this ability has broader possibilities for response-abilities and imagining reparative futures because "what's to love about an alienated existence on a dead planet?" (Bennett 2001:4). In this relation, I will highlight an experience that, despite the very private character, gives another impression of the elsewhere perceived 'dead matter'. I took my kids to a nature, art and science festival. We were walking around a romantic landscaped garden from the end of the 1700s with a hilly landscape, forest vegetation and gorges. The enormous hundreds-of-year-old oak, ash and beech trees and meadows of high grass and humming insects reflected impressions of wilderness. The festival organisers had wrapped thin, white fabrics of approximately 1.5 meter in height around the big trees to indicate routes and create spaces. We followed one route that led to an exhibition/lab space where we could play

music using plants. Each plant had, I think, sensors that connected them to songs, and the sounds and melodies that we could hear depended on how we touched the plants. The kids were a bit worried at first and found it weird and while we were playing, my 4-year-old son stopped and said: “It smells like elderflowers”. I looked around and there, on the back of some of the ‘white’ walls and behind some bushes, was an elderflower bush in bloom. (fieldnotes, May 2018)

This experience brings me to smell. I was overwhelmed and felt like I had accomplished something extraordinary. My son had noticed the sweet smell of elderflowers, signs of early summer, and of course the joy of the cordial and ice-creams we would make. The cool musical plants were drowned out by the smell of a quiet nearby plant, and to me, this shows how “smell draws us into the entangled thread of memory and possibility. [...] But smell, unlike air, is a sign of the presence of another to which we are already responding.” (Tsing 2015:45, 46). This episode took place at the end of this research project, and throughout it, a response-ability to “avoid the apocalypse” for my kids and their kids have grown and been a returning concern, not just for me but also for the actors within the project. Equally, my mind has been constantly circling around how I could cultivate the response-abilities of my kids, both while growing up and as grown-ups. Not that this is exclusive or unique. I can imagine that most people with children and some knowledge about environmental change have still not given up hopes for a livable future. The smell of elderflower and the smelling together with my kids sparked a little hope and well-being. ‘Smelling’ is part of the reskilling described initially in this chapter. It is about using our senses and talking about the experiences to refine relations with food and appreciate it. Smell can make our mouths water by reminding us of delightful dishes and smell is the step before we put something into our mouths. Smelling is part of the curious investigation and encounter-based collaborative with the edible environments. While urban farms and vertical farms become more and more popular, Tina (interview, November 2017) reflects on this:

It is known that it is easier to buy 'local' food in Copenhagen, because where in heavens name is this food out there on the countryside. Yes, they are sent off to China. And it is clear that the tendency for urban farming is growing. While it is crucial to think in urban-rural relations, I find urban farming interesting in the sense that it provides some understanding. I do not think they shall feed Copenhagen. [...] There is such a big focus on the technology - vertical farms and all that - but then it just becomes that urban island-idea again. [...] Then, you should not make food production in Copenhagen, but in the soil and on the fields around the cities.

The tuning into admiration and becoming enchanted by minor sensory observations in the everyday entails compassion and care. Not only does it seem to relieve or deflect concerns and anxiety of alarmism, but it also "provoke new ideas, perspectives, and identities. In an enchanting refrain, sense become nonsense, and then a new sense of things." (Bennett 2001:6). I am consciously using the words 'relieve and deflect' to underpin the ambivalence of the experience of simultaneously 'getting in love' and 'sensing a loss'. What my material presents and with help from the Urban Harvest app, amongst other things, is that learning to gather dandelions, stinging nettles and ground elder in the urban wilderness and cultivate them into kombuchas, soups or as salad components (and not just seeing them as sprouting weeds that should be destroyed with fire or chemicals) connects you to the places where they grow. The interesting thing about noticing is that it involves multiple timescapes - memories and desires. It begins with a tiny curiosity which slowly builds up, but it always builds up something existing and then it can grow and transform itself. It has root and routes.

Our starting points of curiosity vary, just like our taste of food, but one starting point could be listening to the ocean waves, the wind in the trees or memorising the rolling countryside. These are privileged images, I know, and while we grow up in different environments, there is almost always something we can remember. In the introduction, I mentioned my grandfather's gardening and my mother's home cooking, but I should also add that I lived in different urban

apartment buildings most of my childhood. As non-pastoral romantic as this may sound, I still remember the smell of the little pond nearby, the roses from the balconies, and how I was attracted to a nearby forest where we would pick elderflowers, lupin, chestnuts and brambles, and I remember the (lonely) days where everything was so quiet that I was able to hear the humming of the pollinisers and watch their flower work; follow a line of working ants; and turn over rocks, chase sow bugs and make them roll around. The environment around us and the access to edible, delicious spaces and memorable experiences seem most important in order to grow our response-abilities. Recent research on school gardens, community supported agriculture (CSA) and urban community gardens show similar conclusions (Mikulak 2013). Looking at the planners working with this kind of thinking, The Garden City movement of Ebenezer Howard and the work of Clare Cooper Marcus (Marcus 2016; Marcus and Barnes 1999; Marcus and Sachs 2013) – just to name two – is mostly focused on the well-being and health effects of humans staying in green spaces. Showing the positive effects on human well-being is remarkable and important, and the interest in recreational, therapeutic and restorative spaces (in between the vibrant and hectic urban life) seem to be growing once again – both in terms of landscape, public space, hospital architecture and design. What I am trying to add to this knowledge is the relationality – the encounter-based collaboration – that this is not just a pleasurable ‘healing’ process for humans, but also for the living environments. Along with Ingold and Rose, Weir argues that

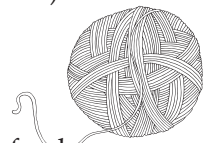
through listening, we become drawn into a communicative relationship with the river. Through communication we acknowledge the sentience and agency of ecology life. We extend subjectivity to place, plants, animals and rivers, and we lay the basis for love, care and ethics with non-human others. (2015:21).

These experiences become places in your map of memories, and you might feel like you want to take care of those places, preserve them. Seeing them destroyed by bulldozers or gardeners would hurt. Furthermore, the very experience of suddenly knowing that weeds are just not

weeds, and to embrace a huge range of plants that are not ‘rejects’ but delicious to eat and *companions* of their surrounding plants (Ahl 2018; Ejrnæs 2016; Meedom et al. 2015; Mikulak 2013; Shiva 2016a), is about slowly learning to notice what to look for. When you find it, joy and pride can occur because enchantment becalms and intensifies perception, unlike overwhelming fear that shuts you down (Bennett 2001:5). It might be precarious, sensitive, and small, but these moments seem to be more activist, more reactionary than the apocalyptic alarmism – also despite some killing (picking and foraging) and dying (composting) taking place. Recent research also shows that cities have higher levels of biodiversity than the countryside due to monocropping and chemical poisons. It is about learning to notice, care for and expand that diversity in public parks, squares, streets and alleys, community gardens, and the private balconies and backyards. When I write ‘companions’ I do not mean to anthromorphicate the plants or organisms that make up the soil but to stress how humans and non-humans are always in the mesh already, constantly collaborating, making space, and taking up space (Ejrnæs 2015; Shiva 2016b) – a perspective that ‘Humanimal relations’ and ‘Fermenting desires’ build further on. Creating and contributing together to atmospheres we sense through seeing, smelling, listening, and sometimes even touch and talk about (Mol 2009).

Thinking reparatively with landscapes

The essential project of the whole study is to understand where food comes from, and an essential argument is that what we eat also shapes and transforms the landscapes around us. Current industrial and monocultural practices of the agricultures that feed us are ecologically destructive, and, therefore, eating is both an ethical and a political question. Despite the fact that those particular industrial practices only account for approx. 25% of the global food production, environmental damage is widespread. Moreover, eating has become a sideline activity and food production and waste have become rather invisible and abstract matters. Throughout the chapters, I have sought to argue why it is important to know where the food that we eat comes from, and



the reason is because ‘going into the foodshed’ (Kloppenborg et al. 1996; Mikulak 2013) is about critically analysing the existing global food system, while also imagining the shapes of ‘germinating possibilities’ that could guide our responses and actions towards reparative futures. Framing the ‘coming into’ is about the process of entering that place between the existing and the alternative, and I have used this framework to go into a world of humans, chickens, eggs, and food waste, and more broadly the more-than-human environments. Mikulak further depicts that coming into the foodshed is about de-commodifying the biography of food while you “self-consciously participate in producing a place that respects the diverse needs and desires of both human and non-human actors.” Coming into this project, I had an assumption that an urbanisation discourse has dominated the practical fields of planning and governance since the UN announced that by 2050, 70% of the World’s population would live in cities, and along with this the rise of research on megacities (Hall 2010), the Urban Age Project led by the London School Economics (Burdett and Sudjic 2007) and the whole planetary urbanisation debate within academia (Brenner 2014; Brenner and Schmid 2012). This meant that I was taken slightly by surprise when Tina from Lejre Municipality (fieldnotes, March 2015, interview October 2016) argued against the urban island-idea and reworked my imagination of place and space:

So there seems to be a train heading towards cities just becoming larger and larger, while at the same time becoming islands because we cannot find the routes where we do not bond regionally. When we make those attachments, links, it is not only about food, but food becomes a means to so much more. [...] An example could be Lejre, where it has become more attractive to live. We see young families moving here because they consider it a cool place to live. We can see that when Christian Puglisi started his farm, the attraction to his restaurants increases because he makes his own vegetables. This is not just good for the countryside, but it also creates something great in the cities because he creates workplaces (in Lejre and Copenhagen). He needs someone to make the sausages and mozzarella in the city. If you see that from a rural-urban perspective, and also in a global perspective, we should question – do we really want all the urban islands

surrounded by dead and exhausted industrial agriculture completely disconnected from the city? And do we want what is being produced on those fields to just be sent off somewhere... in the world? Where it does not matter if it is sent to Copenhagen, Beijing or New York. Where it is just by coincidence that those pigs are produced here. They could just as well have been produced in Poland or Belarus.

What I read here is a sense of place that emphasises nearness and some authenticity while responding to global movements, and some closeness while seeing relations beyond the local. I do not read it as a fixed, homogeneous and closed understanding as it argues against the idea of thinking of places as 'islands'. This description suggests thinking of urban-rural relations and introduces an understanding of places as landscapes. This might not be new landscape architects, farmers or geographers, but thinking of places as landscapes and cities beyond the urban envisages how spaces are always connected, as collaborative movements between humans and non-humans; something that is always changing, although this might be slow and not always visible. In line with this, Massey suggests understanding "places not as point or areas on maps, but as integrations of space and time; as *spatio-temporal events*." (Massey 2005:130), and "we use places to situate ourselves, to convince ourselves that between the celebration of cultural flow and mixity and the nervousness at a natural world that will not stay still" (2005:131). Ingold also describes the landscapes as "the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them." (Ingold 1993:156). Moreover, I could refer back to chapter 3, where I described the understandings of places and practices that the sharing economy in relation to the Sharing City Project invited for. Studying how food and waste move introduced another understanding of place by revealing complex landscapes between local and global, urban and rural, but also the temporality of landscapes. The relationality of space can easily be, and is often, interpreted in relativist terms that blurs the significance of places and leaves an idea that nothing matters. This is not my point, but rather what Massey (2005:140) argues:

what is special about place is precisely that throwntogetherness, the

unavoidable challenge of negotiating a here-and-now (itself drawing on a history and geography of thens and theres); a negotiation which must take place within and between human and nonhuman. This in no way denies a sense of wonder: what could be more stirring than walking the high fells in the knowledge of the history and the geography that has made here today.

While visiting my mother who lives in Andalusia, Spain, I was trying to understand the relations between transformation, spaces, human and non-human. Early one morning, we went for a short walk in the mountains backing on to her home. While walking through the landscape, my mother's friend told me that millions of years ago it used to be under water. It became clear how water had shaped the caves and mountainsides. Those 'natural' transformations appear so slowly, beyond a human timeline, which means that these places have a sense of timelessness, although they, as well as the plants and animals, constantly change and continue to move, erode, rise, flip. Therefore, yes, nothing is fixed or static, landscapes have always transformed themselves and humans have transformed the landscapes ever since we as hunter-gatherers used fire to shape hunting areas (Massey 2005; Mathews 2011; Scott 2017). Research focused on deep time and deep matter argues that the world is not dying, the end is not near, and that nature is a constant process of dying, as Morton puts it in *Ecology without Nature* (2007).

Among others, Scott (2017) disputes how agriculture – in particular, grain – led to growing population and cities, then to states and societies, how this did not lead to better living conditions, only for a few, and agriculture was a very risky business. He also writes, how archaeological interpretations of fossil records show how life as farmers was much harder than life as hunter-gatherers. Elizabeth Fisher (1979) also recognised this in the material historical and anthropological studies of evolution. Together these researchers suggest that the climate catastrophe happened long before the steamer, industrialisation, and rise of capitalism, and could go back as far as to when humans – whether it was the when humans learned to control fire and the rise of agricultural cultures. It is not to argue that we should go back to the hunter-gathe-

rer life, and as Morton writes “I don’t advocate a return to premodern thinking. The ecological thought is modern” (Morton 2010:5). Thinking reparatively with landscapes is, amongst other things, about making the urban-rural relations vivid, germinate and valuable. Eating, tasting and talking about the food that comes from response-able productions and systems – from the landscapes – invite for embodied and storied relations with the landscapes, humans and non-humans who feeds us. The eating and tasting at shared tables serving these response-able foods connect the eating urbanities with the landscapes.

Exploring reparative futures

We seem to find ourselves in a period of ecological crisis and environmental change that challenge human survival on the planet. The paradox here, as Gregersen and Skive (2016) write along with eco critic Timothy Clark, is that the whole environment around humans, in this situation, cannot be ignored and categorised as passive and managerial matters. Skrive and Gregersen point out that “it is in the self-same movement when humans manipulate earth that earth manipulates humans. In the Anthropocene, clear distinctions between active and passive, nature and culture, manipulator and manipulated, human and its surroundings are abolished” (Own translation of Gregersen and Skiveren 2016:30). This is a significant situation that calls for studying and discussing the human sense of self, and its relation to the non-human world, today and historically. In this current situation of ecological destruction, we ought to discuss what will be possible and a livable present and future (if there is a future for humans on Earth, to be slightly apocalyptic). More hopefully put, we should question how to live on and beyond the Anthropocene under circumstances that are more reparative and response-able, humans and non-humans together. As I wrote earlier, there is a common understanding among the social sciences and humanities that the environmental crisis also is a cultural crisis of imagining alternative futures (Ghosh 2016; Gibson et al. 2015; Gregersen and Skiveren 2016; Meedom et al. 2015). I come from a planning field where scenarios, plans, extrapolations, and

modelling are essential methods and reflect a significant sense of future-orientation (Ingold 2014; Sandercock 2004). Somehow the future is always projected into a distanced future, utopian or dystopian, and connected with an attraction to a technological and instrumental fix and inventing the next new thing (Freudental-Pedersen 2018; Freudental-Pedersen and Kesselring 2016; Mikulak 2013). This attraction was also central to the sharing economy debates, which centred around developing the next new digital platform and new technologies and gadgets that are constantly being developed in relation to food production, for instance, drone-surveillance techniques, genmodification or machines using artificial intelligence. Mikulak defines these storylines as 'ecological modernisation' and 'techno-utopian' (Mikulak 2013).

The modern chicken within industrial poultry production is already a cyborg, as Watts (2014) defines them, due to the instrumental human-animal relations. I am rather sceptical to the ideas of technological determinations, although I am not against technology per se. What we might need is another view on technologies and what to use them for, and as I discussed earlier in 'Fermenting Sterile Desires', there are limits to technological fixes. I read an article a few years ago (Oliver 2014) that described how scientists have been trying to design artificial bee pollen from all known components, but there seems to be an unknown 'factor x' missing that they cannot detect. In relation to ideas about technological fixes, I find this particular story about bee pollen important as it suggests a more humble positioning towards the mysteries of ecologies, environments and technologies. Because of the constant mutations that I described in 'Fermenting Sterile Desires' and the unintended consequences of our actions (Freudental-Pedersen 2009), a humble positioning in relation to biosocial relations is fruitful and careful. With inspiration from Le Guin's essay 'The Carrier Bag Theory of Fiction' (1986); reconsidering what is human will also reconsider what technology is. As I wrote in chapter 2, this re-story would entail technology and science to not be linear, reasonable progressive stories, but more like cultural carrier bags of what really goes on between people and around them, how

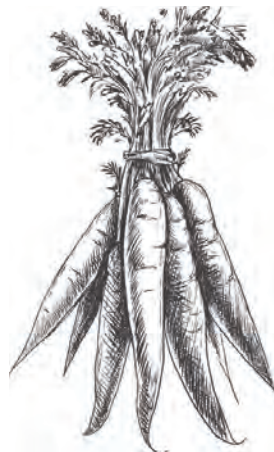
people feel and do, and “relate to everything else the vast sack, this belly of the universe...” (Le Guin 1986:170). Throughout this study, I have been trying to look for imaginations about reparative futures that are already happening – the germinating possibilities. This is not about ignoring the devastations and destructions that are taking place and practices in this current moment, but rather about finding the small sprouts and cracks of alternative ways for world-making.

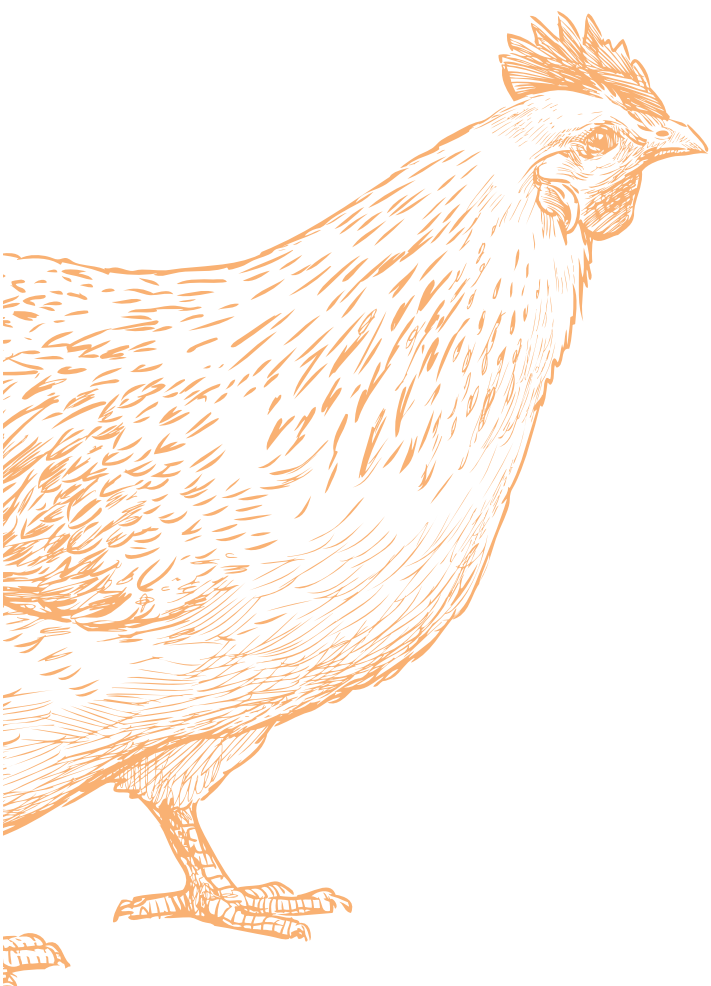
In Le Guin’s (1982) essay ‘A Non-Euclidian View of California As a Cold Place To Be’, she portrays how *utopia* has been hot since Neolithic times. What we need, according to Le Guin, is a utopia in a cold place that would be “dark, wet, obscure, weak, yielding, passive, participatory, circular, cyclical, peaceful, nurturant, retreating, contracting, and cold.” (Le Guin 1982:90). Moreover, Le Guin argues that utopia already exists, “right here in this moment we inhabit utopia” (1982:93). From this perspective, utopian thinking is about noticing where we are right here right now – the germinating possibilities. It is about placing the imagination, utopian thinking or future forecasting right here and explore what we can learn from these situated, biosocial, and response-able practices and their entanglements. Along with this study’s attention on embodiment, enchantment and stories, with Tina’s argument of the places of response-abilities, with Johanne’s humanimal practices, with Johanne’s (and the action group’s) way of fermenting the sterile desires, we might be able to cultivate reparative landscapes that keep humans and non-humans fed and living well.

Going into and along the long history of landscape transformation and human-animal relations can become another kind of utopian thinking that refigures the human-nature entanglements, which I hope that the history of chickens, eggs and humans in ‘Humanimal relations’ is one example of. Using histories (retrospectives) to imagine (future) other world-making practices and stories about what is human as inspired by Fisher (1979), Le Guin(1982, 1986) and Gibson et al. (2015). Le Guin (1986:167) writes:

We've all heard it, we've all heard all about all the sticks and spears and swords, the things to bash and poke and hit with, the long, hard things, but we have not heard about the thing to things in, the container for the thing contained. That is a new story. That is news.

Imagining different futures is not about making things up and projecting something super advanced into a long-distanced future. Imagining, from this perspective, is about telling the 'other' stories about the germinating possibilities, practices of landscape transformation and humanimal relations; it is about tracing old stories, re-telling them and suggesting new world-making stories by doing so.





7. Closure



In the search for other possible futures than the apocalyptic ones, the essential aspect of this study has been the exploration of alternative practices and ways of communicating and presenting these. The study is called 'rebellious waste and food', and I have also sought to present the studied 'rebellious' in writing more cyclical than narrative, more performative than conclusive, more cacophonous than straightening. A thesis still embodies an opening, a middle, and a closure – the place we are right now. Following this study's project of exploring alternative storylines, practices, and entanglements and exploring the idea about carrier bag stories that continue and do not have a revelation after a conflict, the closure of this work will be about looking into the carrier bag. Looking at where we are right here, right now, and looking at how the carrier bag and its content might give some directions of which way to walk. I will try to tie together the research questions first presented in the Introduction, although the conclusion is never the end.

This study's guiding research question has explored how practices with waste and food could cultivate response-abilities that inspire

for reparative futures within urban-rural landscapes? The empirical context is made of studies in relation to a Danish project called 'Sharing City: Can we share our way to better cities and local communities?', the small-scale farm Hegnsholt in Lejre, and Lejre Municipality through the perspective of the Program Manager for Food, Business and Sustainability, Tina Unger. The research question has been studied interdisciplinary and eclectively using ethnographic and interactive methods. Theoretically, I have eclectively pulled different disciplinary theories, concepts, thoughts, experiences, and practices into a bag of research (inspired by Ursula K Le Guin's 'Carrier Bag Theory of Fiction' (1986)). This practice indicates one of the essential points of my work; that we must keep walking and try out different solutions on the way. I have collected and put together different concepts, thoughts, and practices about human-nature entanglements while I have moved through the research project. In this study, stories are not about marketing or making stuff up. Stories are considered as inevitable world-making practices that hold transformative gestures that can spur cultural and multispecies imagination. The languages for and stories about the reparative, cyclical, cacophony, fertile, and composting practice are always becoming. We seem to need, to learn, to notice stories and cultivate a kind of storytelling that goes beyond the modern, structural narratives alert to dualisms, my work with the Carrier Bag Theory as scientific storytelling is an attempt of this.

The study is based on a significantly particular case and I have qualitatively drawn-out, followed and explored concepts, ideas and stories with the Carrier Bag from particular events, situations, projects, places, humans and non-humans. The particularity of the empirical material will in some researcher's eyes contest other scientific norms of generalisability, validity, and verification. I have worked with the relational, situated and practice-oriented understanding of knowledge-creation, and I depict the value and fertility of the chosen case from that perspective on science. Other people's eyes and practices would probably have observed, engaged and noticed other matters and aspects of the studied relations. Throughout the study and par-

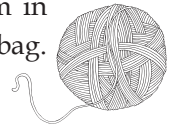
ticularly in chapter 2 'Research design, materials and strategies', I have described why I believe this knowledge-creation is important and meaningful and the values of my perspectives, although I am a young scholar. This is not to say that the study is about me, but that I have influenced the study and others might have influenced it differently. Working with the Carrier Bag Theory was about trying to follow, understand and tell other stories, and I believe that this method worked in that sense, but shall definitely be further explored and performed. It still needs more process, attention and experience.

The Sharing City Project occasioned the perspective on the exchange of food waste initiated by Hegnsholt Farm and this opened up a study of human-nature relations and our abilities to respond to environmental change. I have looked deeply and closely into a specific local situation and practice keeping Hegnsholt Farm in the centre but asked what happens if I stretch out the perspective of time over thousands of years and histories to rethink current agricultural practices. I have chosen to investigate the particular practices around chickens and food waste because these practices are cultivations of human-nature relations that could tell us something about reparative and response-able projects, practices and places of the past, present and future.

Agriculture is a significant and ambiguous human-nature practice that grows and moves through markets, commons, commodities, humans, more-than-human, ecologies, lifeworlds, biospheres, supermarkets, kitchens, garbage cans, and transport vans. In the particular case of this study, the foods (and waste) are exclusive commodities and Hegnsholt is a small-scale farm, and together, this immediately creates tensions in questions of scale-ability, affordability and accessibility. With these tensions in mind, I have tried to contribute with knowledge about the ability to respond to an environmental crisis that comes from affective, embodied experiences of life ecologies and more-than-human worlds; that comes from the transformative gestures of the studied practices of food waste, chickens and eggs. From the empirical context, I have explored a kind of 'rebellling' against set imaginations that block repa-

rative thinking and the cultivating of ecological sensitivity. Some tensions have remained unsolved and open-ended, but as the story and (re)search goes on, there is and shall be room for them in the Carrier Bag.

In this current situation of ecological destruction, it is important to discuss what the possible and liveable present and future will be, how to live on and beyond the Anthropocene under circumstances that are a more reparative and response-able multispecies coexistence. The research question seeks to contribute to this dilemma with knowledge, and I have chosen three methodological grips that not only work to study the questions but that also have become arguments and actions themselves. The first grip is the thinking with carrier bags, the second is about what I have called the stretching of time – questioning a significant situation over a longer period of time – and the third grip is working with other-than-narrative stories and storytelling. With these particular grips, I have tried to catch and study the reparative, response-able, transformative gestures and foodshed and explore them in relation to the empirical context while walking with the carrier bag.



The carrier bag and routes of analysis

In chapter 4 ‘Stories of the Sharing City’, I asked and explored how the actors of the Sharing City Project worked with and contextualised the sharing economy to their local context and situation; how the sharing economy, its practices and aims was storied in the Sharing City Project; what kind of understandings of space, time, human and more-than-human relations and practices the Sharing City Project brought attention to. The Sharing City Project gave rise to thinking of a sharing economy in relation to commons and communality and the relations and different abilities to respond between the civic, public and the private. Considering and working with the sharing economy in relation to municipal contexts and geographies, and over a longer timescale to the particular situation that seemed so hyped, helped to think of the sharing economy in larger societal and environmental perspectives. The stretching of time helped to calm the ‘urgency’ of the sharing

economy down slightly. Furthermore, using the word 'sharing' as an active verb gave rise to understanding places through exchanges of materials and led to a particular focus on sharing food waste and human-animal relations and the emergence of the idea of response-abilities as places and situations that invites for responding. When the Sharing City Project began, the sharing economy was 'hyped' and gained a lot of media and political attention. I was involved in the project to gather and communicate knowledge about the sharing economy and due to project processes in organisations, conclusions had to be pulled out in line with timetables. We were not rushing them through, and at first, the aim was to conduct a white paper with specific suggestions to government officials on how to deal with the sharing economy. We talked it through several times but I believed that the projects and organisations within the sharing economy were in such an early stage that it was too early to predict how the officials would react, and we had to see if this was just a hype or something that had the ability to grow.

Furthermore, it had been suggested that each participating municipality, with our help, should develop a strategy for the sharing economy. Again, we were premature in our thinking as the sharing economy couldn't just have *one* strategy. It touched on so many different issues, areas and aims – both in *what* was being 'shared', *how* it was shared, and *who* was sharing, and this addressed various administrative offices within the municipalities according to different areas of legislative responsibility. One should keep in mind that Denmark is highly regulated and council administrations are usually involved in questions that concern mobility, workforce, tax, zone planning, and waste management, amongst other things. Also, The DAC's thought out strategy was different from what a strategy would be in a municipal context. Therefore, any strategy would have to be approved by the city council, and we found that it would be better to write a summary of what we had learned and gathered and how this could grow further within the municipality in relation to their strategies, plans and visions.

One might be disappointed if one reads the chapter with the hope of

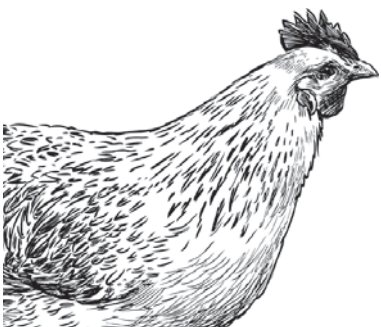
finding a clear-cut conceptualisation of the sharing economy, its consequences for taxation, housing, tourism or workers' rights, and suggestions for how to address these. Also, it is important to note that the experience and knowledge of the sharing economy within the participating municipalities were not affected¹ by international sharing companies such as Airbnb and Uber, and the main focus started from the municipal contexts and concerns (public concerns) rather than an entrepreneurial stance. This together contributed to a different understanding of the sharing economy, which later became a synonym with hyper-neoliberalism and driver for a digital platform economy. This created tensions and even clashes in the understanding of those participating in the project and those outside of the project. In the analysis, I described situations and events where the participating municipalities and sharing economy actors had trouble getting their visions and aims recognised. This exact situation made me wonder why it was so difficult to get their stories recognised and I started to rethink what makes a story and how to understand alternatives, not as nice niches, but to understand their possibilities and response-abilities. It seems imaginations are too locked-in, too blocked and attuned to well-known narratives and positions, which makes it a challenge to really listen to and notice the stories (practices, values, rationalities) that the alternatives suggest. It was puzzling. The Sharing City Project became an entrance to another understanding of spaces and places, practices and peoples, commons and co-existence, humans and non-humans and laid out the basic ideas of the transformative gestures of stories and storytelling.

Right from the start of the Sharing City Project, I kept a close eye on Hegnsholt Farm and Lejre Municipality because of their particular practices and understandings of how to respond to environmental change and their take on the sharing economy. When Hegnsholt's exchange relation with the Copenhagen eateries was closed down, somewhat because of my excitement about the practice that brought the exchange into the radio, this once again provoked

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 1) Only the Culture and Leisure Department at Copenhagen Municipality was politically affected, which meant that it was important for them to only focus on the sharing culture.

questions of stories and abilities, to imagine other ways of inhabiting this planet and transforming its landscapes. I turned my focus to sharing food and waste as they are part of the very substance of life. Food connects human and non-humans and reveals alternative ideas of sharing as we as a species need to eat to survive. This makes food significantly different from other consumables and commodities and this has been a recurring tension throughout the study.

The tension between stories and human-nature practices gained closer attention in chapter 5 'Humanimal relations'. This chapter focused particularly on the human-chicken relations at Hegnsholt Farm and I specifically tried to explore the human-chicken relations within the organisation and its networks; how Hegnsholt's practices connect with past, present and future practices of food production, and what this can teach us about human-nature relations. The chickens and eggs of Hegnsholt are beings sold as commodities, eating others and being eaten, and throughout the chapter, I sought to keep this tension present and open. Going into the foodshed of chickens and eggs, both from Hegnsholt and from industrial productions, now and then, seemed to make it possible to negotiate alternative value practices. By reflecting on what we should have in our Carrier Bag for future food production and human-nature relations, the chapter discussed different human-animal relations and reflected on what should be preserved, cultivated, discarded, or changed. I found the foodshed process relevant to be able to challenge industrial, rational and instrumental notions of the *web of life* that, so far, keeps us fed and alive. Working with a longer time period was about situating Hegnsholt's practices in a larger story of agriculture and peasant life. Not to compare, but because its practices hold ancient inspirations of human-nature relations, and because Hegnsholt is responding to and rebelling against modern, instrumental poultry production and feed production, and seeking to revalue the enormous amounts of food waste.



The chapter discusses domestication, commodification and alienation, care and compassion from a feminist, material, historicist and practice-oriented point of view. Throughout the chapter, I depict how the foods that animals are fed with also affect humans as we eat the animal, and how the living conditions affect the animals, informs and leaves traces in the meat and eggs we consume. I suggest thinking of Hegnsholt's practices as a reparative humanimal relation that is different from a more dualistic and dichotomist human-animal practice, by using recent research of domestication that depicts humans and non-humans as *domesticates* - an active and relational verb that is continuously founded in collaboration. The perspectives not only show how humans are also part of this ecological, industrial and biological process, but also seek to make humans able to ethically question the humanimal entanglements that feed us.

Altogether, these entanglements help move another body of knowledge forward because humans become enmeshed in ecological cycles. From the empirical context, I suggest to think of the chickens at Hegnsholt as collaborators and companions rather than simple commodities, and to stress how humans and non-humans are constantly collaborating, making, and affecting each other - a kind of humanimal companionship. Within this chapter, I also depict Hegnsholt's locality-based practices as part of a reparative societal and global organism that seeks to cultivate an environment where the chickens can thrive and live well, where they can rise again and again, and that is cyclic in both feminist and ecological terms. While keeping the history and theory of commodification in mind, this perspective is mostly referred to as a reminder, but within the chapter, I explored the chickens and eggs from Hegnsholt *both as* commodities and living beings, and the tensions that still hold for further explorations.

The study has phrasings that might give an impression of anthropomorphism, but I am not attempting to make the animals appear human in hierarchical senses. I have become attentive and curious to further observe animals and plants and more-than-humans, their mo-

vements, communications, conterminous and collaborative behaviours, and what we can learn about multispecies coexistence from these observations and engagements. If the observations in this study seem anthromorph, it is due to the immaturity of my writings and observations and not my intent. As animal welfare is crucially important for Hegnsholt, I have attempted to observe and study the well-being of the chickens both by observing them, from Johanne's perspective and through writings and observations by others, as well as by going into the foodshed and researching histories. Trying to observe the chickens as more than products and commodities also seem to involve a bit of subjectification and animation. While these might not be solutions or the right words or concepts, they might be worth exploring because, as Le Guin comments: "look where objectification has taken us" (2017, 16). As we do not speak the same language, the human language and its emotional descriptions are what is available to me now. It could have been fruitful and interesting to study the animals closer with, for instance, a zoologist or veterinarian, or to study the foods closer with, for instance, gastro physicians or food historians. I believe that their perspective and attention could have enriched this study, its attention and language for studying more-than-human well-being and multispecies coexistence, and this might be a call for further study.

In chapter 5 'Fermenting sterile desires', I went even further with these questions of multispecies coexistence. One essential humanimal practice at Hegnsholt Farm is a wish to feed the animals with food waste from restaurants and eateries. As described, the exchange agreement was terminated by food and veterinary authorities due to several theoretical risks (understood as 'what could potentially happen') of contamination and spread of different diseases, diseases that could attack humans and animals as well as have a huge impact on export. The administrative fear of bacteria and an experienced regulatory strive for sterile environments are essential within this debate and negotiations and are what I have chosen to define as 'sterile desires'. These sterile ambitions and desires illustrate a particular view of nature as wild, contaminated, potentially dangerous, and, therefore, something that



should be tamed. I question what we can learn from the closure of the exchange of food waste about 'theoretical risks of contamination' in relation to human-nature relations; how Hegnsholt and its collaborators responded to the closure and the tensions with the regulatory administration, and what we can learn about reparative practices from microbial worlds and movements of bacteria. In this chapter, my attention is connected both with the human responses to the exchange and its closure, and what we can learn from the more-than-human inevitable and unknown responses and mutations as contamination is inevitable.

A perspective that is also part of a modernist perception of natural-cultural division, using the term 'fermenting' before 'sterile desires' in the title of the chapter, was about questioning what should be preserved, cultivated, discarded, and changed from different human-animal and humanimal practices, and what kind of thinking could come out of fermenting ideas. I involved Hegnsholt's responses to the closure as well as those of the action group I was a part of and one significant restaurant partner, Christian F. Puglisi. In particular, we tried to understand what the theoretical risks are and how to address them. It became clear that we needed someone who could 'sanitise' the local exchange flows but finding that person was almost impossible, as most professionals with a knowledge of 'risks' see 'risks' everywhere. Furthermore, we were not convinced that this would prompt the administration to legalise the food waste as feed in this particular setting.

The legislation seems to operate on the basis of a vulnerable global movement of food with many unknowns and between many who do not know each other. One significant observation from the exchange relation between Hegnsholt Farm and, for instance, Puglisi's restaurants, is how they are mutually dependent and cultivate (business) relations based on trust. This practice seems to increase security and sanitation and addresses the vulnerable systems of unknowns significantly different to that of large-scale systems. The study could have been enriched by a closer inspection of the kitchens, the cans, the van, the road, and the farm with an epidemiologist or biologist,

to study the bacteria and contaminations even further and learn more about their way of thinking and what would catch their attention. In this study, I have chosen to put particular focus on the stories and practices of Hegnsholt farm and Lejre and the way in which the action group responded to the closure of the food waste exchange.

As I have described, I sensed that the expected 'uniformity' of the Danish Food and Veterinary Administration was not that united or coherent, and various different interpretations of legislation, interests, positions and perspectives also lived here. As mentioned in the chapter, another study could be to follow the practices and stories of the bacteria, diseases, and the sites and movements of contamination from a national administrative and political point of view, but due to the exact point of the diverse positions and interpretations, the study should not be comparative to this. Instead, it could continue along the lines of the stories in the carrier bag, and I believe that the 'administrative' stories and practices could enrich the knowledge of how to respond to environmental change even further.



In the chapter, the sterile desires and ideas about contamination and mutations were theoretically fermented to explore how 'bacteria' and 'wild' could also be perceived as vital and cyclic food-making and world-making companions. The specific case of closing down the food waste exchange due to theoretical risks of contamination envisions a clash of stories. The chapter depicts that the potential risks of contamination are indeed real as contamination is essential to life (biologically and socially), but not only does the apocalyptic stories of infection blur and neglect responses like those of Hegnsholt and the eateries involved. They also block ways in which Hegnsholt and the restaurants respond to environmental change and immediately shut down imagining alternative and reparative practices. The transformative ge-

stures of these practices are not welcomed, right now. From this study, I seek to depict why we (and the administrations) must follow, write out, and listen carefully to stories like Hegnsholt's and the relation with the eateries because those stories suggest how 'reality' could be different and endorses a mobilisation of the cultural imagination.

Again, the risks of contamination are real but the practices of Hegnsholt Farm seem very real and possible. In this study, I have significantly studied the food waste from the eateries and the questions and responses that the exchange and its closure have given rise to. Hegnsholt also receives a diverse amount of (waste) food from supermarkets, festivals and nearby farms, and for future studies, the diversity could be studied further, for instance, the possible unwanted ecological substances. Also, it could be enriching to study the contamination of multispecies collaboration even further in an interdisciplinary study with gastrophysicians, veterinarians, bacteriologist, geographers, and ethnographers.

Leaving some of the risks behind but continuing the ideas of relational domestication and contamination in the carrier bag, chapter 6 'Tasting landscapes' takes up the practice of eating, tasting, and sense of pleasure. The chapter questions how "the eggs that taste of food waste" could hold transformative gestures and what types of response-abilities could be cultivated from eating and tasting food. Also, within this chapter, I have questioned how the kind of food from Hegnsholt seeks to connect the urbanities of eaters with the ruralities of food producers and how this waste and food might invite 'eaters' into the critical debates about the foodshed. In this chapter, I explored the questions of taste and pleasure from the acknowledgement that what we eat matters for the landscapes of food production (and in return).

The chapter depicts that one way to be drawn into the more-than-human world is through pleasure and enchantment, not guilt nor moralising, and explores how our abilities to notice, see, smell, listen, taste, touch, and talk about food, waste, and the growing environment could make us able to respond to environmental change in a more fertile and

fruitful way. The chapter suggests that situated and sensuous experiences cultivate an ecological sensitivity, the notion of the ecology of life, and the biosphere that feeds us. It is a recurring idea that those engagements and experiences could reconnect people and production, urbanities and ruralities, nature and culture. The chapter seeks to break down a theoretical division between consumers and citizens and uses Mol's (2009) argument that the consumer-citizen exists. Essential to this argument is that 'good taste' and 'doing good' are not naturally bound or pre-given but something that is learned through tasting (practice) and relation (with others and other). Eating ethically is a question of the relations between attention, care and belonging. Following on from the relational argument from the previous three chapters, eating is also what connects humans to the landscapes.



This chapter explored the transformative gestures of the matters themselves, of the embodied and affective experience of eating, of storied food, and how our lives are connected with the biosphere through the gastronomic axis. An axis that connects the table with the farm and the dish with multiple landscapes where the ingredients have grown and been moved through (Mikulak 2013). Getting involved in this axis also involves going into the foodshed because this involves imagining the future of those growing urban-rural landscapes. This part of the analysis, the relation between 'landscapes' and 'taste', could be further explored together with gastro physicians to further understand how landscapes (as biospheres) affects the foods themselves as in taste, structure and nutrition. Also this could be supported together with food and culture historians, among others, to further understand the cultural experiences with taste and the historical developments of the experiences, stories and perceptions of taste and foods. Especially, as this study have not touched upon storied and historical tensions of "civilized urbanities" and "wild ruralities", and how this also affects eating practices and preferences, and understandings of human-nature relations.

Where to take the carrier bag?

The food from Hegnsholt is exclusive and this immediately brings tensions through questions of affordability and accessibility for the wider population. Taking Shiva's (2016) calculations into account that small-scale farmers produce 75% of the world's food using agroecological methods, Hegnsholt's practices are not that alternative. The tension or question should rather address and rebel against the dominant narrative that "industry feeds the world" as their methods have widespread ecological and environmental damages, and as presented with the amount of food waste both in the Global North and Global South, it is the global and industrial movements of food that seem to create the waste. Hegnsholt's food is produced with the conviction to minimise waste, cultivate food quality and ensure access to these kinds of foods, for everyone, now and in the future. The food connects with a kind of 'New Nordic' food story and seems to attract the green creative cultural class and I believe that if we shall search for reparative futures, our knowledge should *also* encompass the practices of those having the resources and privileges to explore and try out alternatives. Those with the abilities to respond to and rebel against the global industrial movement and production of food.

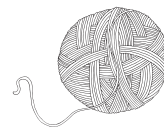
The deliberate choice of following, exploring and bringing attention to the reparative practices can be questioned for not including all the larger structures and mechanisms. This attention has not been about neglecting all the other and trying out some kind of positive psychological trip. Rather it has been about seeing and performing what could be learned from those resisting the apocalypse. Cultivating humanimal practices, preserving onions and elderflower, protecting old breeds, composting, using food waste as feed, and gathering and keeping heirloom seeds might all be practices that immediately appear exclusive, superfluous or harmless. They might even look too beautiful and taste too delicious to appear rebellious. Altogether, I believe to have found that these practices, animals and foods can be considered as rebellious gestures and invitations; quiet comments, responses and alternatives to the industrial, multinational, billi-

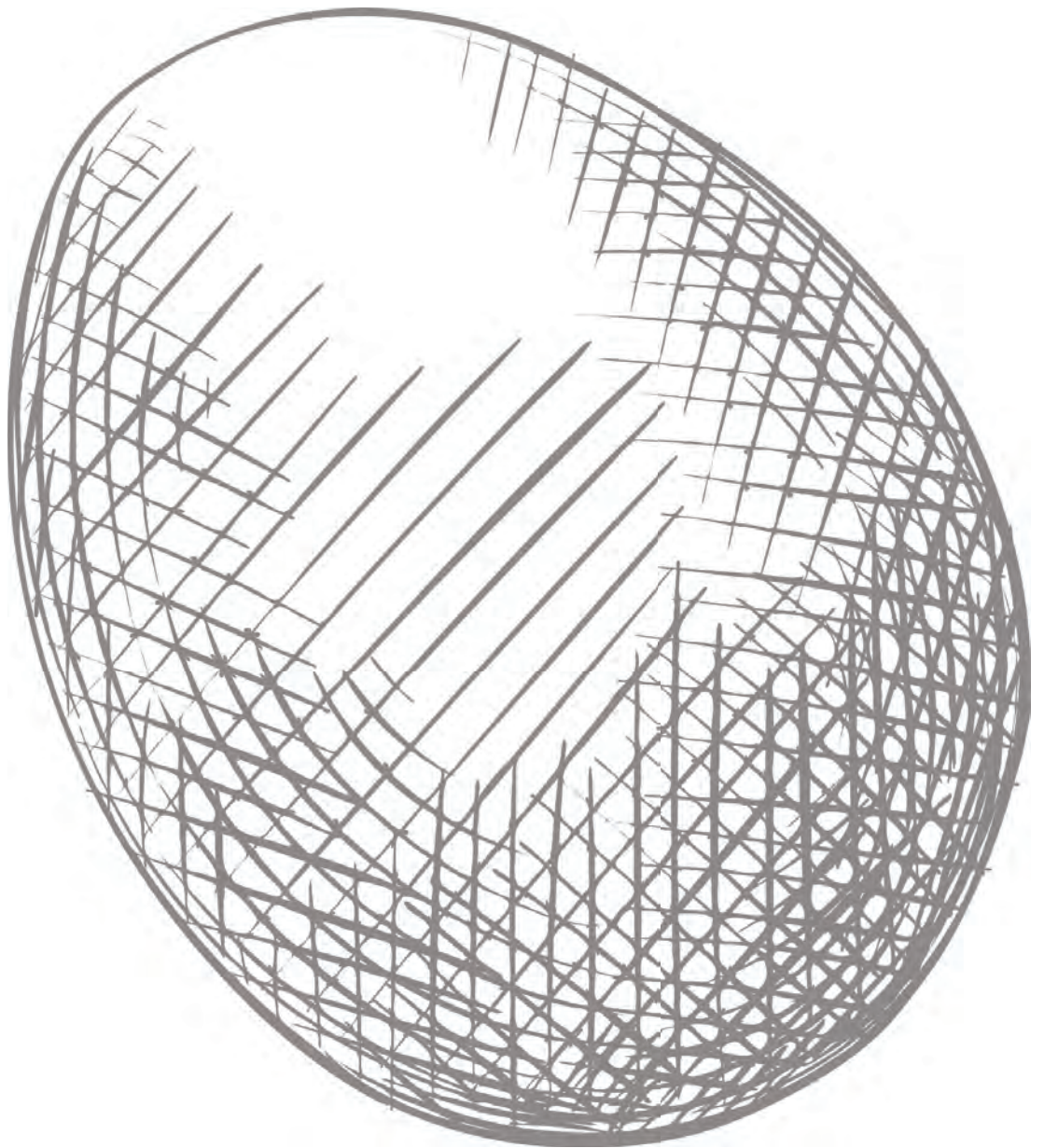
on-dollar food and feed production and distribution corporations. It is still a question if it is possible to fight off these “thugs” with our carrier bags (or is it handbags?). Although, it seems worth exploring in order to be able to gather eggs or elderflowers in our future bags.

Despite the particularity of this study’s empirical focus, I believe that the response-able and reparative gestures and places found in this study, could also be encountered by getting engaged with other non-human beings and matters than eggs, chickens and food waste. Throughout the chapters, I have sought to depict why it is important to know where the food we eat comes from and how it was grown, cultivated, stored and has moved. This is because getting engaged with the foodshed is about critically analysing the existing global food system while also imagining the shapes of practices could guide our responses and actions towards reparative world-making. The kind of knowledge I am trying to suggest is knowledge cultivated from critical, tactile, somatic, and situated sensitivity. I find this essential for addressing environmental change, as it is a knowledge that is very different from the techno-scientific one that permeates current environmental and climate debates so dominantly.

The knowledge I have tried to suggest propels the attention to local-global connections, individual and cultural desires, experiences that expand the notion of food, waste and ecologies, food and waste production, food systems and politics. It is my hope that we hereby can expand the notion of the ecology of life and the biosphere that feeds us. From this study, I am suggesting that the value of an embodied, situated knowledge is not only one for the methodological debates in academia, but also a practical response: this thinking and doing is an attempt to raise the ecological literacy and citizenry, awareness of the global and capital issues of food and waste, and to spur the imagination of alternatives by becoming sensitive of humanimal relations and the living worlds we inhabit and embody. These response-able practices are understood as events, situations and places that invite for and cultivate our response-abilities to address environmental change

and live *beyond* the Anthropocene. We must keep carrying the bag and considering what shall be in, what should be left behind, what shall be cultivated or changed. We must keep exploring the different paths, different world-making practices, and how we as researchers, practitioners and citizens 'storytel' these other realities. I will close the bag for now, and with this quote of Le Guin (1986, 170), try to move incomplete and unfinished further on; "It is a strange realism, but it is a strange reality" and in this unending story, "there is time enough to gather of wild oats and sow them too, and sing to little Oom, and listen to Ool's joke, and watch the newts, and still the story isn't over. Still there are seeds to be gathered, and room in the bag of stars." (1986, 170).





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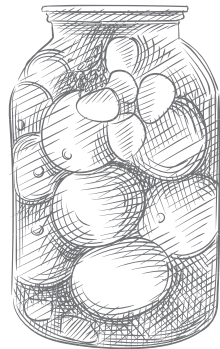
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It might be questionable if we are able to repair the environmental and ecological damages that human actions are responsible for and fundamentally change this planet's landscapes, ecologies and atmospheres. Despite, I find it crucial not to get paralysed by the apocalyptic tales because this seems to block our mind and imagination. This study explores the spaces and practices that invite for responses to environmental change and is doing so by studying actors that practice (as an alternative to paralysis) alternative human-nature world-making with food production and waste management. With the damaging mechanisms in mind, the study has been attentive to small gaps of possible livable futures and the sprouting, germinating and fertile practices, and explores what we might learn from those who try to imagine, think, write, and build alternatives.

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