

Reparative Practices

Invitations from Mundane Urban Ecologies

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Published in:
Nordic Design Research Conference

Publication date:
2019

Document Version
Publisher's PDF, also known as Version of record

Citation for published version (APA):
Fjalland, E. L. P., & Samson, K. (2019). Reparative Practices: Invitations from Mundane Urban Ecologies. *Nordic Design Research Conference*, (8). <http://www.nordes.org/opj/index.php/n13/article/view/472>

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REPARATIVE PRACTICES: INVITATIONS FROM MUNDANE URBAN ECOLOGIES

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ABSTRACT

The paper proposes a reparative turn in co-design towards an attention and sensitivity to more-than-human world-making practices in our urban environments. The notion of ‘reparative’ holds strings with the reparative system that an organism starts when damage is experienced. Thinking-with this biological, cultural and performatively, we propose the reparative as the starting point for learning to notice life-giving potentialities in the Anthropocene. Reparative practices are ethical and political in the sense that we are searching for life-giving practices that can move us beyond design practices in the Anthropocene. Hence, by bringing attention to environmental enchantments related to sensory everyday practices we propose that designers and citizens alike can initiate reparative futures.

URBAN ECOLOGIES IN THE ANTHROPOCENE

The consumer culture, waste production, real estate development and fast distribution of goods in urban environments influence the lives and liveability of other species. While humans hold significant abilities to change these systems, non-humans also hold agencies that shall be acknowledged and worked-with. Central to our argument is that it is not humans alone that forms

and transforms our habitats. Hence, we must include unruly collaborations with non-human lives as we might learn about planetary survival from living and design with more-than-human inhabitation.

While keeping the anthropogenic destructive practices in mind, we will seek to bring along the knowledge that these urban environments are constantly becoming, constantly re-made and inhabited in a collaboration between humans and more-than-humans. Studies of the Anthropocene often bring attention to how a human centred exploration of nature takes place, and as others, we suggest to bring a more-than-human attention into the urban environments. We insist on urbanities in continuation of an ecological thinking: cyclical, a multitude of coherent and cacophonous practices, collaborations and counter-works that constantly constitute the urban environments - the materials, materialities, the humans, the more-than-humans, and manifold spheres. We ask what reparative practices we can learn from urban ecologies, and how we thought situated knowledges can inspire a careful more-than-human co-design practice.

In this article, we acknowledge urbanisation as a major driver in the age of the Anthropocene and point to how modern urbanization processes have severe consequences for terraforming. Inspired by ecofeminism and the recent material turn in social sciences and humanities, we set out to care for cultivating reparative futures (Fjalland 2019). We are sensitive to everyday practices such as cooking and kitchen practices, domestic waste production, and multispecies co-habitation of the so-called private and public spaces. This article will suggest how design practices can be part of cultivating *reparative practices*, not by inventing more closed design solutions to the environmental crisis but by redirecting attention to the vibrant matters already existing in the city and *working with* these ecologies of life (Fjalland 2019).

The material and feminist turn in human and social science studies of the Anthropocene has already created knowledges and brought new situated knowledges into the fields of forestry (e.g. Matthews (2011; 2017)), plantation (e.g. Tsing (2015)), coral reefs (e.g. Haraway (2016; 2016)), fish farming (e.g. Swanson (2018)), just to name a few. However, as we regard the city as a major driver in the Anthropocene, it can be fruitful to bring these bodies of knowledges and ecological sensitivities into an attention to the urban troubles. Troubles understood as the destructive and damaging reflections of planetary urbanisation, industrialisation and capitalist logics. Inspired by Haraway (2016) we must stay in the trouble in order to search for the reparative practices that could inspire multispecies co-design. Not to accept them, but to understand what emerges in the ruins and explore whether there is more than ruins and possibilities of life that goes beyond the Anthropocene; And not merely by posing a distanced critique to current urbanisation processes. Rather we must stay with the trouble to engage with environmental, social and mental ecologies (Guattari 2014) and to explore reparative practices that are situated within them. As Guattari notes, ecology cannot be boiled down to a concern of the environmental alone, it also includes social and mental ecologies – our habits and for instance how we engage with our environment in every day life. Hence, reparative practices are not environmental alone, they include social relations and mental engagement understood as an awareness to how we as humans relate to more-than human worlds.

REPARATIVE PRACTICES, MUNDANE SITUATIONS AND SITES

The modern cities are characterized by divisions, distancing and absence of living bodies and sensorial landscapes. Somehow cities seem to be greatly influenced by absences, “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, pp. 26, 132). We seek to explore, what might come from observing, acknowledging and cultivating these practices. As 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’, we suggest that reparative practices takes place from within the modernised city as main site for Anthropocene damage. Interpreting reparative into 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” (2015, p.ii). From this perspective, we need to cultivate a careful attention to the reparative practices of caring and collaborative multispecies inhabitation to address environmental change. We shall bring careful attention of reparative practices in the spheres, rhythms, relations, matters, and

entanglements of humans and nonhumans (Fjalland 2019). And we need first and foremost to practice careful attention in our urban environments. Cultivating a careful attention, we suggest is about cultivating our ecological sensitivity; a sensitivity to the more-than-human worlds and rhythms in taking place in urban ecologies. All together, we find that these intentions towards reparative practices inspire methods of co-design.

Cultivating a careful attention to more-than-human worlds and their reparative practices does not necessarily begin in the professional design lab designing new solutions. Rather we are suggesting that the mundane, the everyday practices, are the places to begin cultivating ecological sensitivities. Everyday is understood as all the mundane activities such as cooking, food collection, caring for the kids, commuting and spending time in the city, participating in the shared spaces of motion and rest. Hence, co-producing new forms of relationality and living is a task for urban citizens and designers alike. A kind of thinking that is in continuation of Mikulak (2013, p.76), who depict that addressing the environmental and ecological crisis requires “a profound shift away from this form of top-down, technocratic, disembodied form of knowledge”. In this paper we explore the reparative practices with the wish to develop and explore ways of engaging with the urban ecologies and mattering cultures of urban environments. In the city, we propose 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.

Reparative practices are suggested as alternatives that overcomes the rigidity, divisions and hard surfaces of the city. Spatial and urban forms have historically been regarded in terms of the forms of architecture and design. Spatial forms that are characterized by durability, hard materials and divisions: “Cities have been understood as separate parts rather than dynamically interrelated: not just in terms of areas and districts, but also in the separation of people from the built environment in research, the separation of work from residence in urban planning practices” (Molina 2017, p.97). A feminist perspective allows for both transversality and intersections transversing the divisions in the modern city (Molina 2017; Trogal 2017).

For the definition of processual and transversal approached to urban space, feminist geographer, Doreen 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” (1994, p.154), and in her book *For Space* (2005), she suggests to understand “places not as points or areas on maps, but as integrations of space and time; as spatio-temporal events.” (2005, p.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” (Massey 2005, p.131).

Feminist thinkers as Massey propose a dynamic and relational understanding of places that is fruitful in order for us to understand our ability to respond to environmental change through attention to careful and embodied practices that potentially shape and initiate reparative urban ecologies. Also it introduces an understanding of the spatial transgressing the so-called public and private places, even what is inside and outside. As Isabelle Stengers argues in *Cosmopolitics I/II* (2010, pp. 32–33) “an ecology is processual and relational, adding relations to a multiplicity of relations, proposing new value systems, meanings, modes of evaluation.” This points directly to the interweaving of ecologies and value systems, which foregrounds the necessity to practice and knitting new urban ecologies from the ecologies that are already there.

MUNDANE ENCHANTMENTS AND EVERYDAY PRACTICES OF CARE

Puig de la Bellacasa (2017, p.36) suggests a turn from matters of fact to matters of concern, and she describes how “affirming that matters of fact are matters of concern encourages awareness of the vulnerability of the facts and things we set out to study and criticise”. We, as humanist researchers and designers must learn to notice biophysical actualities and biosocial relations, and explore how these entanglements are “coproducing new forms of worldwide relationality and living (im)possibility” (2017, p.136). Following biophysical agencies, aesthetics can be reformulated into affects and sensibilities: “a way of describing things that doesn’t split affects, concerns, and worries from the staging of their lively existence” (2017, p.38). With Puig de la Bellacasa’s perspectives, we see fertile grounds for co-producing new forms of relationality in our urban environments. Following, it is through embodied practices and a sensitivity of the more-than-human in our everyday lives, such as eating, smelling, sorting waste, moving, that seem to hold gestures and sites for cultivating ecological sensitivity for reparative futures. Puig de la Bellacasa continues that care entails a speculative ethics and a political commitment as care is not an innocent notion and practice. The feminist fields of care are “a living terrain that seems to need to be constantly reclaimed from idealized meanings” (Puig de la Bellacasa 2017, p.8). Care can be tender and encumbered, and involves affection and maintenance as “there always seem to be an inherent positioning [ethical and political] that happens through engagements with caring” (Puig de la Bellacasa 2017, p.6).

Hence, we see care not as a fixed set of design practices or tools (such as care-taking practices) but rather as an ethical and political commitment, an ecological sensitivity situated according to the urban trouble at

hand. If care is considered a relational practice - it is a practice that requires the presence of someone or somebody. Hence, we work with a situated and immersed body confined by its everyday relationality. Thinking and practicing the everyday life in relation to environmental change and care, Sarah Pink (2012, p.12) depicts that:

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.

In continuation of this thinking, we must bring attention to the enchantments, to the careful and reparative practices in the mundane lives that thinks and works *with* the more-than-human as active co-designers. We shall explore how these practices might invite and inspire careful co-designs. Together, we believe that from this kind of exploration and knowledge can learn about reparative futures, and possibly, a more compassionate multispecies coexistence than the one practiced in the Anthropocene.

We are continuing our exploration of how enchantment and affection are aspects of the cultivation of careful ecological sensitivity and a way to grasp reparative practices. Jane Bennett articulates the notion of *vibrant matter* and according to her, “the bodily disciplines through which ethical sensibilities and social relations are formed and reformed are *themselves* political and constitute a whole (underexplored) field of “micropolitics” (2010, p.xii)”. Hence, affects and our embodied practices are essential in forming the political and in our potential to reparative urban futures. Furthermore, Bennett depicts against the story of modern life as being disenchanted, a place of dearth and alienation, writing that this story “discourages affective attachment to that world” (2001, p.1). She explores how the “affective forces of those [enchanted] moments might be deployed to propel ethical generosity” (2001, p.1), and depicts that enchantment becalms and intensifies perception, unlike overwhelming fear that shuts you down (2001, p.5).

SPECULATIVE EXPLORATIONS

In the following we will explore three examples of how to give careful attention to reparative practices through mundane more-than-human worlds. As illustrated above, vibrant matters co-exist with us and are part of us, hence we suggest to explore the interwoven ecologies of mental, social and environmental potentials: hence we see the following explorations as examples of speculative ethics of care that engages with everyday enchantment and affection – what might belongs to our mental ecologies and landscapes, but

with the capacity to transform into reparative environments through care and co-design.

HYPERNATING BEES AND KITCHEN MATTERS

Nørrebro, January 2019

I am taking the organic kitchen waste down. Oozy juices drip out, leak and spill into the floor and staircase. Microbe cultures grow in secret in the waste bin while humans are at work. They have a social life on their own engaging with one another and the vibrant matters of our waste. Through these mattering cultures, microbes silently transform waste into new life. Why then, do we prevent this vitalism to become part of our everyday environments? Why are organic kitchen waste transported to energy recycling plants outside the city when they could easily matter in backyard environments providing rich compost and soil for backyard gardens?

Nørrebro, January 2019

A bee crawls slowly and confused against the morning light. Enchanted and curious my kids discovered two more. While writing this paper in cold and grey weeks of January, five bees have passed the kitchen floor. With concern we bring them out on the balcony knowing that they are not able to survive the cold. Will they survive in summer?

Climate scientists have pointed to the fact, that bees are disappearing worldwide. When the bees disappear, the ecosystem potentially breaks down and humanity risks food shortage as plants cannot pollinate without bees. How and why have we arrived at this moment, where bees must be sustained, where chickens are reduced to 'poultry', and 'egg-production' is done with no care to the hen that make them. How did we arrive in a situation where fast urbanization removes land with rich biodiversity to build modern apartments dividing humans from the vibrant ecologies they are part of? Not only chickens and eggs seem to be torn from their lifeworlds, also humans are separated from the ecologies that basically sustain their lives.



Figure 1: a dizzy bee on the kitchen floor. Credits: Author



Figure 2: "...And you are part of the environment". Credits: Other Story <http://www.other-story.org/>

BIOSPHERIC ENCOUNTERS AND THE COMPOSTS OF CARE

Amager, January 2016

Tina mentioned something like that the soil is dying. There is already dead soil. It lacks nutrition and nothing can grow from it. Nitrat (check up). We import soil from Polen – sphagnum or something like that (check it up word). We can fertilize (check word) the soil by composting. What is soil actually?

Amager, June 2016

I have begun to care for the compost – I am literary thinking about how it is and learning to notice when it is 'hungry', too wet, and the different smells. Not an expert at all. Seems a bit like getting a baby ;-P

Amager, October 2017

I have started to plan my garden beds. There is a principle in ecological gardening that suggests crop rotation, which is about considering which varieties are good together and which ones can nourish the soil for next year's crops. Apparently, onions and are good for carrots to avoid a kind of carrot flies. Also ensure some flowers for the pollinizers. Fun fact, a variety of carrots seem to have come to Europe in 12th century with the moors. It is the big collaboration and contamination!

Watering and nursing the plants, caring about the compost is about learning to notice and then relate, in a very practical sense. Observations about compost and soil express this relation between noticing and caring. Learning to notice have also had a kind of therapeutically aspect as you start noticing the living, growing and constantly mutating environments. We need exploring the different possibilities in connecting humans with the vital infrastructures through embodied experiences. For instance, compost experiences made our household waste production very visible and learning about what can go into a compost made questions all the stuff that could not go: 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. While “food” has become almost too abstract to grasp and the systems increasingly invisible, this exploration suggests that a curiosity will cultivate urban environments. Embodied knowledge emerges, and it will manifest why we should be concerned about the biosphere that feeds us.

DANDELIONS AND ELDERFLOWERS - TASTING AND SMELLING URBAN LANDSCAPES

Amager, May 2018

I took my kids to a festival about nature, science, and art. We were walking around the romantic landscape garden from the end of the 1700s with its hilly landscape, and forest vegetation and gorges. The hundreds of years old and enormous oaks, ashes and beeches and the meadows with high grass and humming insects reflects impressions of wilderness. The festival organisers had folded 1,5-meter broad thin, white fabrics around the big trees to direct some routes and create some spaces. We followed one route that lead to an exhibition-lab space where we could play music with plants. For each plant they had put in some sensors and connected them with some tunes, and the sounds and melodies that we could hear would depend on how we touched the plants. First the kids were a bit worried and found it weird, and while we are playing my 4-year-old son stopped and said that “It smells like elderflowers”. I looked around, and there on the backside of some of the ‘white’ walls and behind some bushes there was an elderflower bush in bloom.

Amager, June 2018

The sensations of tasting for the first time kombucha made from dandelions of a friend, the exploration of the ordinary affects and materialities, not of re-enchantment of the world but engaging with something that was there all along. I thought dandelions were poisonous. The taste was surprisingly good – a little yeasty-flower-soil-ish – but the experience was delicate and whenever I saw a dandelion after that experience, I remembered that moment of pleasurable surprise. 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.

The fieldnotes draws us to smelling and sensing. The ‘smart’ cool-playing plants was drowned out by the smell of elderflower sweetness, and 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, pp.45, 46). Equally, our minds are circling around how we can cultivate the response-abilities of our kids. Here, the smell of elderflowers and the smelling together, sparks a hope and wellbeing. ‘Smelling’ is about using our senses and talking about the experiences to refine relations with food and appreciate it. Smelling is part of the curious investigation and encounter-based collaborative with the edible urban environment. Learning to notice, forage, garden, cook and taste is about becoming conscious of how our lives is connected with the biosphere through the gastronomic axis. Engaging with this axis is about imagining the future of those growing landscapes and becoming concerned with the living. Hence, the minor sensations of tasting and smelling become the points of departure for reparative urban futures - they allow for compassion and care. By tasting and smelling urban landscapes, we argue that design must be situated and bodily engaged in the environment. The mundane moments of enchantment lead and enact a *response-ability* about learning to seeing and enjoying the environments and landscapes that feed and nurture us.



Figure 3: Child studying life – studying dandelions. Screenshot of Instagram story. Credits: Author

LEARNING MORE-THAN-HUMAN CARE FROM REPARATIVE PRACTICES

Through the three explorations above, we propose situated, material and embodied practices that draw on the ideas in co-design but opening the ‘co-’ up towards the more-than-human practices. We think of this collaboration in terms of situating the designer-activists in materialities, of sensibilities and embodied practices, and not letting the anthropos alone define the solutions nor thinking the anthropos as the master-designer. The Danish and Swedish expression “at tage hånd om” means “to take care of”. Practically, to care for is an entailment *to care with the hand* (Brolund de Carvalho & Linna 2017, p.258). Hence, composting, fermenting and growing plants are material practices that co-create with the more-than human matters at hand – what can be called a *handy-knowledge*. Making sourdough bread is an example of this type of knowledge. “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, p.76). Cooking, composting, foraging, planting, parenting, baking bread and other mundane domestic practices, requires this kind of knowledge. A transformative knowledge that “requires that you become viscerally involved with the dough, pulling and stretching, caressing until it becomes an extension of your arm. This is embodied, sticky knowledge at its most delicious.” (Mikulak 2013, p.162). Our significant point is that these practices, immediately understood as private or domestic, are essentially reparative and can be related with public spaces, biospheres, atmospheres, consumer-scapes, political ecologies and ethics if they are shared and distributed.

Thinking responses to environmental change with mundane practices and enchantment is our significant other point. Housekeeping might not always be pleasurable and we acknowledge the feminist movements of liberating women from domestic lives. However, our feminist perspective is not a gendered one, but rather about situating ourselves by privileging the mundane, the tactile, the affections, the enchantments and humans relation with more-than-human lives. For instance, composting practices take care of waste, not as problem but “as the unavoidable material surplus of living that has to be taken care of in the course of everyday life.” (Kinnunen 2017, p.66). Composting is an encounter with urban matters that spurs enchantments of the mundane. Kinnunen notes how “the waste treatment practices are no longer motivated by guilt, but curious, corresponding and even loving attachment with matter. Curiosity, interest, excitement, and wonder are affects that are described when talking about Bokashi.” (2017, p.72). Also, in our speculative explorations, curiosity and excitement were the starting points opening up for other worlds in the mundane

A starting point is to engage bodily and sensory with the food and waste cultures that has been hidden throughout

modern urbanisation processes. How can we re-discover material sensibilities and re-immersing ourselves in the more than human, for instance, for a re-enchantment of the human-animal lives that has been separated historically in the modern age of planetary urbanization. For urban design, this entails transgressing the disciplinary boundaries related to urban design and architecture, but also the divisions between work life and everyday life. Hence, feminist reparative practices of care can be formulated as transversal practices across professional and every day practices. Following Brolund de Carvalho and Linna (2017), we argue that feminist ethics of care “allows us to transgress our roles as architects (...) as the ethics of care emerge from real life practices, and can offer a new kind of urban category” (Brolund de Carvalho & Linna 2017, p. 256). Mundane practices are here a starting point for thinking and designing with the vitalism and cracks of more than human lives. A vitalism that has always been there, but have been suppressed and forgotten in the sanitization and infrastructural regulations in the modern city. However, we stress that it is not only a question of developing an analytical framework, as suggested by Brolund de Carvalho & Linna (2017, p.256), but to spur material imaginations and ecological attentions through already embodying practices (we are already eating, wasting, washing, walking, breathing) in our own everyday life.

It is about learning to notice these practices and increase our curiosity (Fjalland 2019). It is an invitation to take on the doings of embodied practices for citizens, activists, architects and designers alike. Let us for instance start by eating together and bring our homely cooked food into public space, let’s observe the ‘trespassing’ dandelions, elderflowers, bees, soil bacteria and earthworms at work. Softening the boundaries between the body and its environment through collecting, eating and sharing are political acts that transverse the boundaries of the city, its divisions of private and public, of inside and outside. Bennett (2010, p.49) argues, “on this model of eating, human and nonhuman bodies re-corporealize and response to each other; both exercising formative power and both offering themselves as matter to be acted on. Eating appears as a series of mutual transformations in which the border between inside and outside becomes blurry: my meal both is, and is not mine.” Eating, exploring and sharing the smell and tastes of urban landscapes are embodied practices of everyday life that do not recognize the divisions and dichotomies characterizing modern urban life. We believe that embodiment is a practice that can situate *any* body. Hence, a practice to take on in the streets, into the supermarkets, grocery stories, kitchens and backyards. Finally, what might we learn about these practices than can care-fully inform the discipline and practice of co-design?

REPARATIVE PRACTICES AS CO-DESIGN

Our research contribution can be defined as a situated and feminist proposition into the discipline of co-design. A co-design in theory and practice that work with reparative practices and correlates with Haraway's concept of 'sympoiesis' which she understands as "collectively-producing systems that do not have a self-defined spatial and temporal boundaries" (Haraway 2016, p.33). In this sense, we suggest that co-design does not start from the individual designer. Rather, practicing co-design as a reparative practice emerge from the multiple relations, entanglements and sensitivities we can find in urban ecologies. If we take the point of departure in the three speculative explorations above. Co-design then orients towards three interrelated futures 1) a theory of urban design in which co-design includes the more-than-human. Co-design is understood as a becoming and a sensitivity *with* the more-than-human through the mundane practices and takes place in the everyday city as biosocial encounters. 2) A situated and material practice that does neither design objects anew, nor does it impose design labs or methods upon urban matters. Rather design is conceived as all the reparative practices engaging the hand, gut, nose, eyes, and tongue, and the senses with the (vibrant) matters already unfolding in the everyday city. 3) A thinking-with that collapses the above scheduled binary between theory and practice underlining the *with* in Haraway's sympoiesis. Such thinking-with starts for instance with the fermentation of soil, or fermenting practices at the kitchen table in which microbe agency participate in urban transformation processes.

Finally, working with co-design as a material feminist practice calls for a revision of thing-ness in design. As noted by Binder et al. (2011) in *Design Things*, "a major challenge for design is "what is being designed as designers increasingly deal with matters of concerns and assemblies (2011, pp.1–3). The materialities in the discipline of co-design engages with *thing-ing* understood as design objects with the capacity to bring societal, urgent issues to the fore in democratic design processes (Binder et al. 2011). While this to some extent correlates with the embodied political practices of reparative practices, it operates with a human-centred design subject relating with design-objects. While being aware that designer usually initiate a project in the first place, we suggest that designers thinking-with will have to leave human-centred design behind and instead work from the *sym-* in sympoiesis. To be more concrete, to situate themselves in the mundane environments and to engage bodily with composting, fermenting, working with the food waste – not by bringing in concepts but by embodying the potentials in the mundane. Here, designers can make matters public by for instance presenting and co-designing with composts, with nature in the city, with bees, seeds and plants. Puig de la Bellacasa (2017, p.38) suggests that a thing-politics means "a representation of things that gives them a

valid voice in the constitution of a "we" by the democratic assembly".

Reparative practices as co-design we see as such a process of making urban ecologies present. Bringing into urban design for instance, how bees pollinate, how they contribute to the eco-system and how they can constitute and transform mental ecologies of living with. Imagine bee hives, composts and dandelions on every street corner in the city, integrated into the urban fabric and as common as the bench, the trash bin, the playground. Designing to integrate more than human worlds into urban environment would not only be of enchantment for the citizen-user, it would also make citizen co-designers of their own urban ecologic environments. Bringing kitchen waste into your local compost, taking compost back to your kitchen to grow your plants. Co-designing is here not a human-centred act of the designer, but can be understood as an ecology of practices. Practices that go through the situated, relational bodies and the sensitivities to the urban environment. Practices that relate humans, more than humans, the environment and everyday life. Reparative practices as co-design does in this sense not mean inventing design solutions. Rather it is a co-designing with the urban ecologies already there: the soil, the eco-systems, nature in the city.

To summarize, our research contribution is firstly; an analytical framework expanding co-design to engage with existing urban ecologies and to include the more-than-human, for instance by allowing materialities, animals, smells and taste invade our mental ecologies. Secondly; a proposal for designers and citizens alike to engage in reparative practices which we understand as embodied and situated engagements with for instance composting, fermenting, sensing and exploring the city to find these moments of affection and enchantments. Thirdly, as designers and citizens to collapse the divisions between private-public, human and non-human activity, work life and everyday life by enforcing affective relations with kitchen matters, composts, gardens. Hence, reparative practices as co-design means to leave visual renderings and site plans behind, and engage with the sensuous urban landscapes - not only the humanly-designed ones and things, but also the environments that co-exist despite the modern urbanization and division. Starting from the mundane and material middles – the backyard, the dandelions growing in the streets, the bees pollinating the flowers in the balconies, the elderflowers trees, we can support and strengthen more-than-human worldings, weavings and pathways. Co-design might happen across the domestic spaces, the professional offices and labs, the political spaces of the streets - by making kitchen-sink matters and more than human worlds matter publicly.

REFERENCES

Bennett, J., 2001. *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*, New Jersey: Princeton University Press.

- Bennett, J., 2010. *Vibrant Matter: A Political Ecology of Things*, Duke University Press.
- Binder, T. et al., 2011. *Design Things* T. Binder et al., eds., MIT Press.
- Brolund de Carvalho, S. & Linna, A., 2017. Urban Caring: Fostering Relationships, foregrounding Diversity and building subsistence economies. In M. Schalk, T. Kristiansson, & R. Mazé, eds. *Feminist Futures of Spatial Practice. Materialisms, Activisms, Dialogues, Pedagogies, Projections*. Baunach, Germany: ADDR Art architecture Design Research, pp. 253–264.
- Fjalland, E. L. P. 2019. *Rebellious Waste & Food: Searching for reparative practices within urban-rural landscapes*. Denmark: Roskilde University.
- Gibson, K. et al., 2015. *Manifesto for Living in the Anthropocene* K. Gibson, D. B. Rose, & R. Fincher, eds., New York: punctum books.
- Guattari, F. 2014, *Three Ecologies*. Bloomsbury Academic.
- Haraway, D. et al., 2016. Anthropologists Are Talking – About the Anthropocene. *Ethnos*, 81(3), pp.535–564.
- Haraway, D., 2016. *Staying with the Trouble: Making Kin in the Chthulucene*, Chicago Manual Press.
- Kinnunen, V., 2017. Bokashi composting as a matrixal borderspace. In V. Kinnunen & A. V. Rovaniemi, eds. *Living Ethics in a more-than-human world*. Rovaniemi, Finland: The University of Lapland, pp. 66–74.
- Massey, D., 1994. *Space, Place, and Gender*, Cambridge: Polity Press.
- Massey, D.B., 2005. *For space*, London: Sage Publications Ltd.
- Mathews, A., 2017. Ghostly Forms and Forrest Histories. In A. Tsing et al., eds. *Arts of Living on a Damaged Planet: Ghosts of the Anthropocene*. Minnesota: University of Minnesota Press, pp. 145–155.
- Mathews, A.S., 2011. *Instituting Nature: Authority, Expertise, and Power in Mexican Forests*, MIT Press. Available at: <http://www.jstor.org/stable/j.ctt5hhdn3>.
- Mikulak, M., 2013. *The Politics of the Pantry: Stories, Food, and Social Change*, McGill-Queen's University Press.
- Molina, I., 2017. Prologue: When Space Intersects Feminism. In M. Schalk, T. Kristiansson, & R. Mazé, eds. *Feminist Futures of Spatial Practice. Materialisms, Activisms, Dialogues, Pedagogies, Projections*. Baunach, Germany: ADDR Art architecture Design Research, pp. 95–100.
- Pink, S., 2012. *Situating Everyday Life: Practices and Places*, London: SAGE Publications Ltd.
- Puig de la Bellacasa, M., 2017. *Matters of Care: Speculative Ethics in More than Human Worlds*, University of Minnesota Press.
- Stengers, I., 2010. *Cosmopolitics I (Posthumanities)*, University of Minnesota Press.
- Swanson, H.A., 2018. Landscapes, by comparison: Practices of enacting salmon in Hokkaido, Japan. In K. Omura et al., eds. *The World Multiple: The Quotidian Politics of Knowing and Generating Entangled Worlds*. Routledge.
- Trogal, K., 2017. Feminist Pedagogies. Making transversal and Mutual connections across difference. In M. Schalk, T. Kristiansson, & R. Mazé, eds. *Feminist Futures of Spatial Practice. Materialisms, Activisms, Dialogues, Pedagogies, Projections*. Baunach, Germany: AADR – Art Architecture Design Research, pp. 239–252.
- Tsing, A., 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton, New Jersey: Princeton University Press.