Weaving back our Wilderness

Exploring the potential of housing co-ops as a catalyst for ecosystem-care

Research plan
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8 November 2024

Cover image: Artist Vanessa Barragão uses ancestral techniques to transform waste materials into tapestries inspired by river delta and coral reef ecosystems. In this time-intensive open-ended practice the final result is always a surprise. With her work she aims to raise awareness by showing the beauty of the fragile ecosystems she values. (Barragão, 2023)

Introduction

Following CNN's November 5, 2024, U.S. election coverage, many feel disillusioned about prospects for international climate action. Polls and interviews throughout the evening revealed that the average U.S. voter prioritizes "the economy" over other issues, linking it closely to daily stability and prosperity. Notably, support for Donald J. Trump increased among African Americans, Latinos (including Puerto Ricans), and women, despite him publicly discriminating these groups in the past. For policy-makers and climate action-takers this was an eye-opener. Most individuals have other priorities: caring for their families, earning money and paying off debts, finding appropriate housing.

On the same day, I attended a Pakhuis de Zwijger Special on the topic of Empowering Resilient Communities. Bart van den Hurk, co-chair of an IPCC working group, addressed the intentions of the 7th IPCC assessment report. The 6th IPCC report (2021) revealed to us that climate change is a certainty. The problem is very real, tangible and urgent. Yet current action seems insufficient. Van den Hurk recognized that the 6th report (weighing 29 kg's in print!) missed practical qualities needed to engage the average civilian. Top-down actions tend to run into local resistance and lack critical support. In the conception of the 7th report, special attention is being paid to implementation of climate measures in cities (IPCC, n.d.). This includes the involvement of local communities and local knowledge for decision-making.

This issue is also addressed in the book "*Buying time for climate action: Exploring ways around stumbling blocks*" by J. W. Vasbinder and J. Sim (2021). It is part of a series by Para Limes, a research group that explores complex systems. In the book, Jan W. Vasbinder stresses that the efforts and agreements made by national and global governing institutions are proving to be too slow in the urgent matter of climate change. Politics tend to have difficulties to prioritize long-term societal benefits over short-term fixes (p. 1-2).

Problem statement & Relevance

The loss of ecosystems is an especially stressing matter. Donna J. Haraway (2016) warns for the irreversible loss of 'double death': the death of an organism that makes an entire species go extinct. In the Netherlands less than 15% of preindustrial biodiversity levels remains (Schutterhelm, 2024). There is an urgent need to provide habitats for the surviving species that are home to our lands. This is the best chance we have at ever finding the future balance between humans and non-human species that all of our scientists, theorists, idealists, activists and dreamers imagine and all humans need.

In the Netherlands, we already know what we need to do. The rapid decrease of biodiversity is a result of the removal and pollution of ecosystemic grounds. Agricultural and bio-industrial practices are contributing to these problems in many ways: spreading pesticides, nitrogen and replacing ecosystemic swamp forests, reedlands and water landscapes by monocultures and turning peatland into CO2 by draining it. (Boele, n.d.)

An unpleasant symptom of an unbalanced ecosystem: a carcass at the Oostvaardersplassen. By Raymond Rutting for Volkskrant (Hotse Smit, 2018).

To rebuild an ecosystem is not a natural process. Dutch biologist Frans Vera documented the activities around the construction of a balanced ecosystem in the biggest human-made ecosystem in the world, the Oostvaardersplassen in Flevoland (Vera, 2009). Part of a polder drainage area that was previously under water, it would have never been there without human interference. Unfortunately, the mix of species that was introduced by humans did not stabilize into a self-sustaining ecosystem naturally. Overpopulation of grazing animals led to mass starvation multiple times. The overgrazing led to the decline of bird populations. Carps outcompeted most of the other fish due to a lack of natural enemies. Up until this day population-management is used to keep a certain balance.

The story of the Oostvaardersplassen is not all roses. After over 50 years there is still an ongoing, at times heated debate on nature management: should humans meddle in to cultivate our desired biodiversity or do we let nature go its way (Hotse Smit, 2018)? Louise Vet, Director of the Dutch Institute for Ecology thinks there is no other way. The harm we

did to our ecosystems has deregulated the systems nature has spent 3.8 billion years to come up with. Leaving new habitats to develop on their own is likely not a good way to protect biodiversity. Humans could have an important local role in helping ecosystems recover, working to restore their balance and protecting them against other humans. Carefully tailored interference is necessary to make up for not-so-careful past actions (De Vries, 2024).

So, since large-scale top-down fails, humans around the world need to start prioritizing other-than-human species to avoid a total collapse of what is left of our biodiversity. We need to get busy weaving back our wilderness.

Theorists and anthropologists that dive into human care for ecosystems emphasize the need for recovering human-ecosystem relations as a starting point. Donna J. Haraway's take (2016) is an almost spiritual new enlightened human that has recovered its primal connection to nature. She introduces the concept of 'kinship': a family-like commitment of mutual responsibility and meaningful connection. The entanglement of humans and non-human species in kinship would be the solid base for instinctive care and protection.

These types of natural human-ecosystem interweavings are often found in what the western world refers to as less developed populations. Examples often include indigenous peoples and other more traditional cultures that are more directly dependent on their natural surroundings. Yet in western societies there is very little left of this tangible interdependence. According to Haraway and like-minded scholars, the current human culture revolves too much about individualism and capitalism. Here the human that does care for ecosystems is an exception. Yet there are myriad examples of human-ecosystem care and protection practices, which happen mostly though activism and voluntary or subsidized work. Local communities like this are present in great numbers in the Dutch rural landscape (Midden-Delfland Vereniging, n.d.). Assuming that these people are also part of the individualist, capitalist western culture, I wonder what motivates and drives them.

Across literature and practical knowledge about these themes the importance of collective or communal action is frequently highlighted. Anna Tsing stresses that 'without collaborations, we all die' (Tsing, 2015, p. 28). Haraway's idea of kin includes human togetherness too: instead of the nuclear family she suggests bigger kin-networks where care and responsibility are shared. Vasbinder identifies the potential of grassroot initiatives to make changes at a smaller scale. Empowering local communities can create faster and more tailored solutions while avoiding the slowness of these big institutions. (p. 110-111).

In practice this also holds up: From his experience as a climate action researcher and as a leading member of the successful action group FossielVrij, Vatan Hüzeirs first and foremost advice is to 'stop being an individual and join a group' (VPRO Tegenlicht, 2024). From central members of nature and landscape-protection groups in Midden-Delfland I learned about their activities. Working together in organizations helps with both managing tasks and putting weight on the table in political matters (12 October 2024).

In architecture, this collective approach is easily aligned with the idea of the housing cooperative: a form of living together with more than just nuclear family relations. With varying levels and aspects of interwovenness, humans intentionally relate their daily lives through their housing arrangements. This can include shared spaces and resources, care-

taking, ownership and decision-making, activities and pursuing shared ideals like sustainability and affordable housing (Lengkeek, pp. 5-18, 2022).

Haraway discusses the requirements for kinship: a certain closeness is necessary to create a strong bond. One cannot feel close to all other inhabitants of the earth. Kin is contextual and limited to those that an individual knows. Although it's not mandatory, physical proximity certainly helps (Haraway, 2016, pp. 99-103). Housing can foster kinship in a multitude of ways. When humans take place in any environment, it gives them a chance to grow roots there too. Experiencing the complex functioning of an ecosystem through daily interaction may be the most effective way to form human-non-human kinships. Humans in a housing cooperative often have a more explicit intention to make connections, and might thus be more open to forming bonds with local ecosystems (OPEN Rotterdam, 2021).

Other opportunities lie in inspiring others to engage in ecosystem-care. Giving the caring activities and their impact a physical place in an environment makes them more visible to external visitors. Another possibility is to actively invite people to participate and to become the host to local ecosystem-caring projects.

In practice a risk is that communities that live together have a tendency to distance themselves from the rest of the world (OPEN Rotterdam, 2021). In the worst case this results in idealist individuals pulling away from the public debate. Yet evidence shows that humans can easily be persuaded by other humans to take action for a good cause (Bregman, 2024).

In this research the potential of the housing co-op as a catalyst for human care for ecosystems will be explored:

What is the role of housing in the development of local communities that care for ecosystems?

Theoretical framework

Theory about human-ecosystem relations comes in great volume. This research will mainly be based on three central works.

In *Staying with the Trouble: Making Kin in the Chthulucene* (2016), Donna Haraway advocates for rethinking human-nature relationships through collective action and interconnectedness to confront ecological crises. She introduces the "Chthulucene" as a new era that focuses on "making kin" with other species, encouraging cooperative relationships that resist domination. By "staying with the trouble," Haraway calls for sustained, shared action and responsibility, embracing complexity and fostering multispecies alliances.

In *Matters of Care: Speculative Ethics in More than Human Worlds* (2017), Maria Puig de la Bellacasa examines the ethics of "care" as a collective human responsibility that extends beyond the human sphere to include ecosystems, technologies, and non-human beings. She calls for collaborative, responsible practices that respect and nurture interconnected lives, proposing care as a foundation for global ecological and social justice.

In *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (2022), Anna Tsing explores the resilience of collective human and non-human efforts through the story of the matsutake mushroom, which thrives in disturbed landscapes and brings together diverse people in its global trade. She explores how shared human action, even under precarious conditions, can cultivate new forms of cooperation and mutual survival amid what she calls "capitalist ruins".

The books all revolve around the optimistic approach of speculative thinking. This is an interesting method of challenging established norms and ideas through envisioning alternatives. It can be of great use in architecture thinking too. From my perspective they are very eye-opening and I gladly let myself get lost in the educated imagination of the authors. Yet sometimes I miss a note of realism and relatability (which can be a pitfall for architects too). Though inspiring, the discussed examples tend to be distant and abstract for most people living their lives in western societies. In this research I would like to stay critical and relevant by connecting these thought-provoking idealist views to real stories that take place in the Netherlands today.

Two books will provide more insight in the theory on cooperative housing:

In *Governing the Commons: The Evolution of Institutions for Collective Action* (1990), Elinor Ostrom explores how communities can manage shared resources, or "common-pool resources" (CPRs). Ostrom challenges the "tragedy of the commons" theory, which suggests that individuals acting in their own self-interest will inevitably overexploit common resources. She demonstrates that communities can create self-organized institutions with local rules and norms to govern these resources sustainably. It emphasizes the importance of local knowledge, collective action, and adaptive governance systems in maintaining the balance between resource use and conservation. It also includes 8 design principles that could provide a helpful framework for organizing research outcomes.

In *Operatie Wooncoöperatie: Uit de wooncrisis door gemeenschappelijk bezit* (2022), Arie Lengkeek and Peter Kuenzli explore the potential of housing cooperatives as a solution to the housing crisis in the Netherlands. By moving away from the individual ownership model and embracing collective action, residents can co-own and manage housing,

creating affordable, inclusive, and resilient communities. Housing cooperatives promote sustainability ideals by fostering shared responsibility, reducing environmental impact, and supporting local engagement. Through examples and legal insights, the book envisions cooperatives as a path to empower communities.

Lastly, for clarity a notion should be given on the difference between individuals, communities and humans. In current western societies most humans will first and foremostly see themselves as individuals, making autonomous choices. When considering the participation in (collective) ecosystem care-taking action, individuals need to be inspired, persuaded, activated. Communities refer to intentional groups of individuals or humans, this can include kinships as well. Collectives and cooperations refer to groups of people that unite themselves in organizations or live in collective ownership situations. “Humans” is a more general term that can be interpreted as individuals, communities or even the entire world population. It only distinguishes them from other species that inhabit planet earth.

Methods

Like ecosystems, the relations explored in this research are of complex nature. An open-ended investigation will set out to answer the following subquestions:

1. **What can be learned from important theoretical works on the nature of human-ecosystem care relations?**

   What is the role of current mainstream housing practice in the lack of human-ecosystem care? What should theoretically be done to fuel these care practices? What are possible design implications? What should be looked for in fieldwork? What questions could be asked?

2. **Why and how do humans care for their local ecosystems in practice?**

   What inspires individuals to care for their local ecosystems? Ideals? Compassion? Climate change? Their surroundings? What drives individuals to take action? Intrinsic motivation? Friends and neighbors? Recreation? Meaning-making? What curbs humans in their potential of caring? Agency? Time? Money? Knowledge? Conflict? Priorities? How do community dynamics influence this process? What are possible design implications?

3. **What can be learned from important theoretical works on cooperative housing?**

   What aspects can be distinguished that differs cooperative housing from current practice? What possibilities does that give for ecosystem care and protection? What pitfalls should be considered? What does this imply for process and design?

4. **What possibilities for enhancing human ecosystem-care can the housing cooperative offer in practice?**

   What comes of taking action and pursuing ideals in housing co-ops? What are advantages and limitations? How do community dynamics differ in housing co-ops? How do these communities relate to the "outside world"? What design implications can be derived from this?

Question 1 and 3 will be answered through literature studies and will provide a framework for the fieldwork intended to answer question 2 and 4. The theory will help me know where to look, acting as the basis for a set of questions I would like to answer in ethnographic research.

For question 2, a careful approach is paramount. To find qualitative information on motivations of humans to participate in ecosystem care, I feel that more than an interview is needed. By asking individuals to spend a day with them in their caring activities, I hope to get insight in what sparks their connection to nature. Some possible participants are:

- Zuivel van Winden: local circular dairy farm
- Pluktuin Schipluiden: volunteers at collective harvest garden
- Midden-Delfland Vereniging: volunteer organization for political landscape protection and collective management
- Meadow Bird Pact Midden-Delfland: organization with professionals and volunteers
- Shepherd: the local shepherd of the sheep herd

For question 4, a location visit is also preferable. I would like to be able to meet 1 or more individual at each site visit to get an idea of community dynamics. Although the project does not necessarily need to be nature oriented, a requirement is that the inhabitants engage in some kind of externally oriented action. Seeing the way in which housing cooperatives are used can be especially useful in uncovering design implications. Some case studies I consider approaching are:

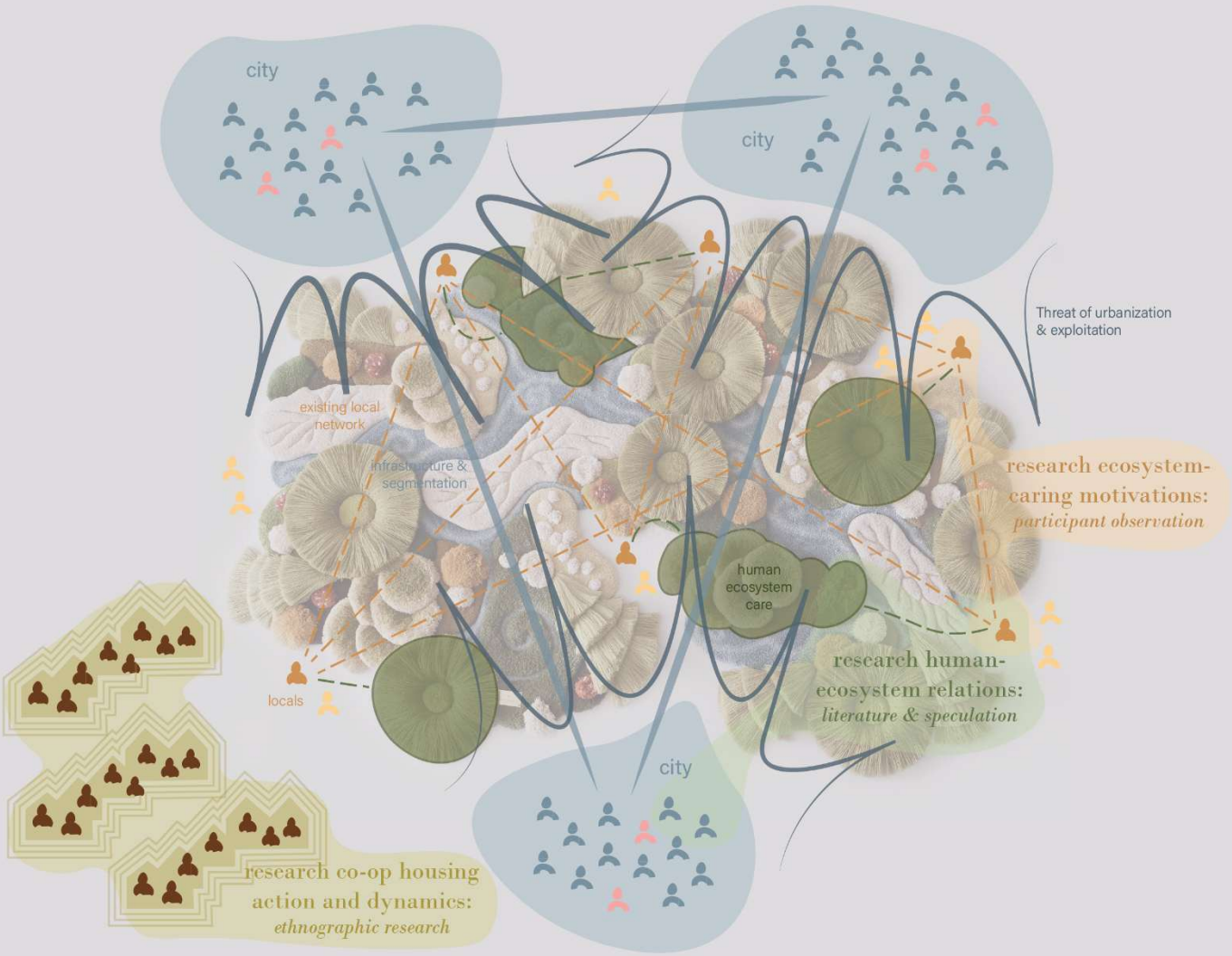
- Project Kamp: a semi-permanent settlement of young adults that set out to restore a landscape in Portugal. They focus on circularity, local communities and share videos.
- De Warren: a social, affordable living space for a diverse community in Amsterdam, combining shared responsibility and communal living, and demonstrates that citizens can independently develop and manage housing.
- Collective Ecosystem Boschgaard: An affordable housing complex of re-used materials
- Aardehuis Olst: a natural and ecological neighborhood of self-sustaining clay houses, where all aspects of sustainability are integrated.

Documentation will be done by analyzing literature through speculative writing. For the ethnographic research, drawings will be made to collect spatial data. A framework needs to be developed to organize more value-based data.

Schemes: the two schemes explain a current situation and a speculative future scenario. Both have the carpet designed by Vanessa Barragão as a central point. It symbolized an ecosystem in need of human care and protection.

The first scheme shows a group of locals that live near the ecosystem and try to collectively care for it. At the same time people from the city are a threat to further degeneration. As the care-taking practices are not visible, they do not grow. The relations researched in subquestion 1, 2 and 4 are displayed.

In the second scheme we see a housing cooporation that has been empowered with connection to nature, agency and the opportunity to inspire others (both local and from surrounding cities) to care for the ecosystem. Being able to do their work optimally, the ecosystem now has the highest potential to thrive. Research question 3 researches the ability of housing co-ops to spark action.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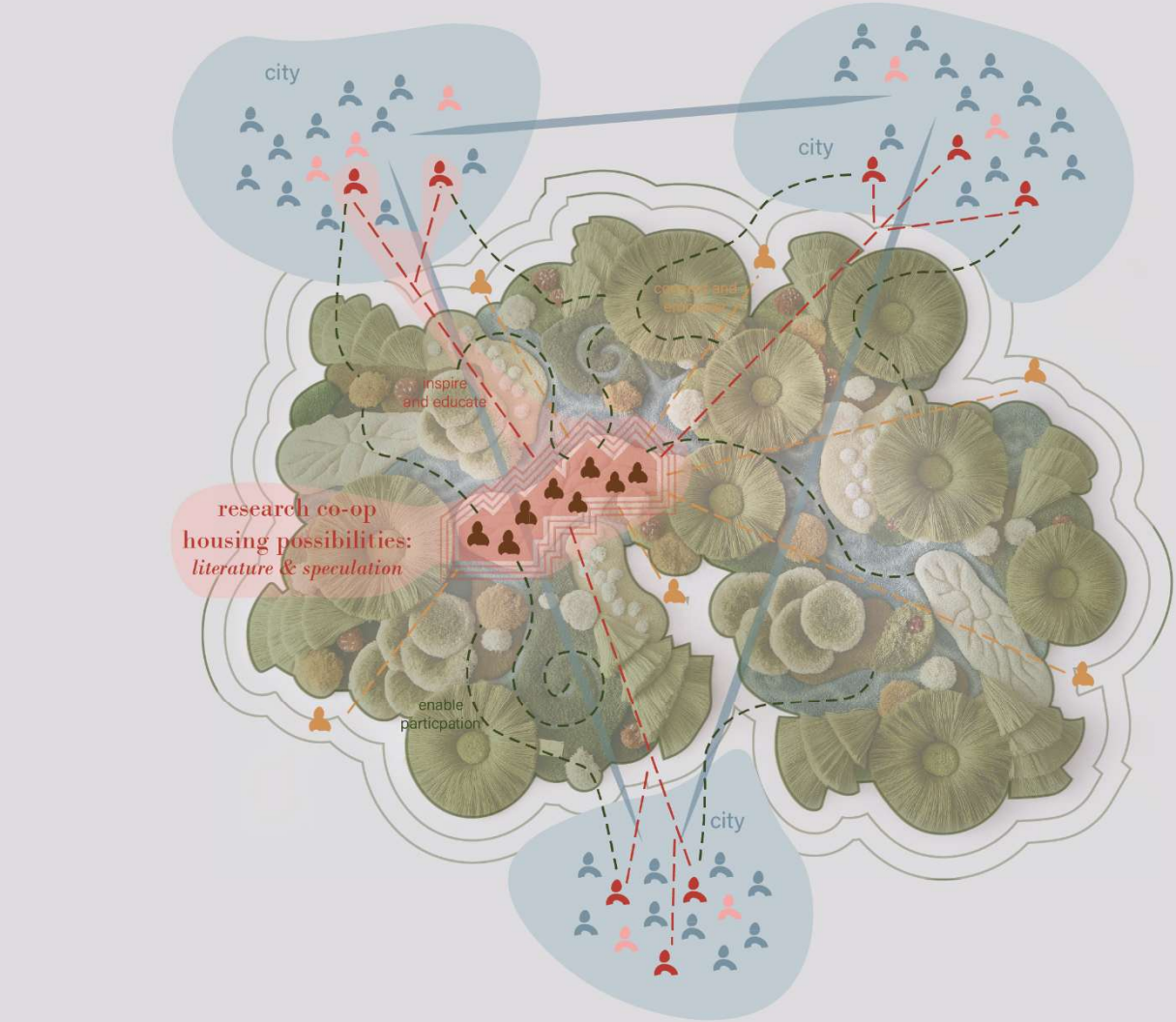
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Main literature

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