

Fostering Human-Nature Relationships in Urban Planning in Times of Social-Ecological crises
From Anthropocentrism to Human-Nature Partnerships for Sustainability Transformations

Problem Framing

Our relationship with the planet needs to change fundamentally, as the global social-ecological crises are symptoms of a profound relationship crisis between human and non-human nature. Promoting the interconnectedness of human and non-human nature is therefore seen as an important lever for sustainability transformations.

A central driving force of the social-ecological crises is urbanisation. Cities are highly human-made places that historically represent human dominance and control over non-human nature. This anthropocentric worldview considers humans to be above nature and thus justifies technical control and the (unlimited) availability of non-human nature for human needs. These ideas of a hierarchical human-nature relationship are increasingly being critically discussed and are seen as an important cause of the social-ecological crises.

An important institution for shaping urban environments is urban planning. Seto, Parnell, and Elmqvist (2013) see in the logic of urban planning a history of decoupling biodiversity, ecosystems and urban development, together with the over-emphasis of technical solutions that allow the governance of urban life to be thought independently of natural conditions. Although planning concepts are supposed to serve the protection and fostering of urban nature, for example, the added value of non-human nature is primarily justified by the social and economic benefits for humans. Therefore, the basic thesis of this PhD project is that a further development of non-anthropocentric approaches in urban planning is necessary, as anthropocentric approaches further reinforce the relationship crisis between human and non-human nature instead of contributing to its solution.

Solution Approach

In sustainability sciences, relational approaches which develop alternatives to the criticised hierarchical and anthropocentric approaches are increasingly of interest. One such approach is the resonance theory by Hartmut Rosa (2019). By contrasting resonance and alienation, Rosa describes different forms of human world relations and formulates the normative idea that resonance, and not the abundance of resources and opportunities for availability accumulated in modern societies, constitutes a good life. Artmann (2022) reflects on the resonance theory against the background of social-ecological crises and outlines the idea of a human-nature partnership to strengthen human-nature resonance as target knowledge for sustainability transformations. In a human-nature partnership, both partners meet at eye level and speak with their own voices, which according to Rosa (2019) is a basic prerequisite for resonance. Conceptually, a human-nature partnership offers an alternative to dominance by conceiving of non-human nature as an independent subject with agency, arguing for the recognition of limits to the availability of non-human nature as a meaningful necessity for a good human life.

My PhD project translates the human-nature partnership approach to the context of urban planning. The established anthropocentric values, goals and worldviews in urban planning will be challenged through the integration of other perspectives. Of particular relevance are perspectives that recognise the intrinsic values and agency of non-human nature and seek to strengthen human self-efficacy through relational skills such as compassion and care. Especially in the urban context, it seems useful to engage in the development of positive visions and future scenarios that address non-hierarchical human-nature relationships in order to promote non-anthropocentric planning approaches.

Research Gaps and Research Questions

Previous research rarely addresses the role of relational qualities of human-nature relationships in cities to promote sustainability transformations. My PhD project therefore addresses urban human-nature partnerships as an alternative vision to anthropocentric approaches in the context of urban planning, focusing on the importance of system goals, worldviews and values as well as their transformation as effective leverage points for sustainability transformations. While inner transformations are seen as a way to enable more connectedness and sustainability, they are mostly explored at the individual level. However, they are the basis for collective ways of thinking, acting and organizing society, for example in urban planning.

My overarching research question of the PhD project is therefore:

How can human-nature relationships be (better) considered as leverage points for sustainability transformations in urban planning?

My cumulative PhD project is divided into three steps, each leading to the publication of an article in a scientific journal. In order to approach the overarching research question, the status quo of human-nature relationships in urban planning will first be investigated, in order to build on this to develop conceptual proposals for a human-nature partnership and finally to develop and implement possible applications of the concept in collaboration with planning practice. The process is guided in each of the three steps by a research question:

1. What is the role of human-nature relationships in promoting sustainability transformations *through* urban planning?
2. How can the relational approach of a human-nature partnership be conceptualised and operationalised *in* urban planning?
3. How can (transformative) visions of a human-nature partnership be designed *with* urban planning?

Research Approach and Methodology

The PhD project aims to contribute to a better conceptual understanding of human-nature-resonance in the context of urban planning. In doing so, the work packages make different contributions to planning and transformation research:

1. In the first year, the focus of activities is on analysis. In the context of the discussion on sustainability transformations in cities, the role of urban planning in promoting human-nature relationships is investigated through a systematic literature review. Findings on the support of sustainability transformations *through* urban planning will emerge.
2. The second year focuses on the conceptualisation of a human-nature partnership in the context of urban planning. For this purpose, suitable relationship qualities are identified, then operationalised in an explorative case study design for the context of urban planning and examined with the help of the Q-method. The findings contribute to strengthening sustainability transformations *in* urban planning.

3. In the third year, the focus is on co-creation. First, a workshop design for participatory visioning is developed, and then positive visions of the future for a human-nature partnership are elaborated in an urban planning case study. The work thereby supports the design of transformative visions *with* urban planning.

Keywords: social-ecological crises, human-nature relationships, human-nature resonance, sustainability science, relational thinking, urban planning, sustainability transformation, leverage points

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