

Urban Space and Everyday Adaptations

Rethinking commons, co-living, and activism for the Anthropocene City

Mathilda Rosengren [1], **Franziska Polleter** [2],
Josefine Sarkez-Knudsen [3] & **Flavia Alice Mameli** [4]

[1] *Malmö University (Sweden)*

[2] *TU Berlin (Germany)*

[3] *Lund University (Sweden)*

[4] *University of Kassel (Germany)*

Abstract

This paper addresses Jem Bendell's concept of "deep adaptation" in the Anthropocene through the lens of everyday urban practices in contemporary Northern Europe. It proposes that this "deep adaptation" should be defined less in relation to a socio-ecological "collapse" and more through everyday occurrences in present-day urban environments.

Entering into a critical conversation with Bendell's conceptual "4 Rs" framework, the paper draws on primary data from several cities in Sweden and Germany to show how, in practice, *resilience* can be found in the "quiet activism" of leisure gardeners; how ingrained notions of restricted land use may be *relinquished* through "commoning" urban space; how novel constellations of co-living *restores* old ideas of intragenerational urban cohabitation; and, finally, how a path to *reconciliation* may be articulated through an ontological shift away from an anthropocentric urban planning, towards one that recognises other-than-human beings as legitimate dwellers in the urban landscape.

Accounting for urbanities of enmeshed societal, ecological, and spatial trajectories, the paper reveals an inhibiting anthropocentrism in Bendell's framework and ultimately points to how his "creatively constructed hope" for the future may be found, not in an impending global collapse, but in everyday adaptations and embodied acts that stretch far beyond the human.

Keywords

Anthropocene, Deep adaptation, Relinquishment, Urban commons, Urban co-living, Green activism, More-than-human urbanities, Urban design, Sweden, Germany

DOI

<https://doi.org/10.47982/spool.2022.2.01>

Introduction

Predicting the future has always held a special allure for humankind. From the personal to the planetary, predictions have served to instil a sense of control and security in an often ungraspable world. In the past, this labour fell on prophets, seers, and other clairvoyants, reading the “signs” of earth and skies and calling on the otherworldly to dare to make sense of the factual world to come. As Nostradamus, the doomsday prophet par excellence of the last millennium, put it: “With astrological calculations certifying the prophecy in the daytime; there is nothing more to the holiest future prediction than free courage” (Leoni, 2000 [1961], p.131). Today, with scientifically established, human-induced climate change gradually altering every aspect of life on Earth, many social scientific scholars have felt encouraged to predict the futurity of humanity at large, and the specific causes and effects that our joint survival will depend upon. Nevertheless, though the courage to face potential planetary doom is admirable, on multiple occasions these theoretical musings have fallen significantly short when applied to an actual, situated present rather than a predicted, universal future. In fact, in making haste to theorise our futures in the Anthropocene, social scientists run the risk of ignoring how *present-day* actions may play a part in changing these prophesied trajectories.

In this paper we seek to address one such disputed theory, Jem Bendell’s (2020 [2018]) concept of “deep adaptation” in the Anthropocene, through the lens of everyday urban life and practices in contemporary Northern Europe¹. Drawing on empirical accounts from a number of cities in Sweden and Germany, we propose that such theorising need not uniquely be defined in relation to specific or dramatic turns of events or “collapses” (like Bendell does), but instead can be advantageously approached through everyday practices in each particular urban environment. Bendell’s theory has been adequately critiqued elsewhere, with many sceptical of his doomsday prognosis of an “ecologically-induced societal collapse” and his “cherry picking” of scientific data to further this theory of an irrevocable Armageddon (Hayward et. al. 2019; Nicholas et al., 2020). We take these criticisms to heart while recognising the recent influence his theory has had on Western environmental activism, rather than outright rejecting Bendell’s conceptual framework. In this piece, we enter into a constructive yet critical conversation with the four key notions that he presents: *resilience*, *relinquishment*, *restoration*, and *reconciliation*.

Bendell (2020) expresses the wish that these four “Rs” may act as a “useful framework for community dialogue in the face of climate change” (p.23). Firstly, he promotes a concept of *resilience* that focuses on how humans can develop psychologically and mentally resilient approaches as a means to tackle the coming threats and traumas that the supposed climate collapse will bring about – arguing against the climate science’s common notion of resilience, which he sees as primarily focused on material development and progress. This, according to Bendell, appears counterproductive to a future in which material progress might not be an option. The latter point feeds into the second “R”, *relinquishment*, in which Bendell argues for people and communities to “[let] go of assets, behaviours and beliefs” that each in their own way would worsen the impending collapse (p.22). Thirdly, *restoration* concerns how humans can rediscover and return to older, more sustainable ways of living that the current “hydrocarbon-fuelled civilisation [has] eroded” (p.22). This would mean reconnecting with the “natural” world, such as the rewilding of managed landscapes, adapting diets to seasonal produce, and a return to ways of socialising that encourages “increased community-level productivity and support” (p.23). Finally, *reconciliation* for Bendell means that humanity, to “avoid creating more harm by acting from suppressed panic” (p.23), has to accept its ultimate demise as part of the societal collapse to come.

Aside from the critique already recounted in the paragraphs above, we find a number of specific issues with Bendell’s four “Rs”. There is a seductive logic in how their functions are left implicit and vague while simultaneously being dogmatically focused on one singular, defining outcome – allowing readers to rally

¹ With this narrow geographical focus, we do not seek to universalise the widely different and unequal experiences that the climate crisis has brought, and will increasingly bring, about. Rather, this focus allows for a minute contextualisation of everyday practices in specific urban and regional constellations, as is relevant to the argument of this article.

around a *common cause* (the societal-ecological collapse) without encountering the struggle of finding *common ground* in a world in which everyday, local experiences of the climate crisis vary greatly. This logic does little to further constructive responses to the issues at hand beyond its obvious theoretical aspirations. By only briefly explaining the concepts (both in the article itself and blog posts elsewhere), Bendell leaves it to the reader to discern what the four “Rs” can actually achieve. In addition, with his eyes set on a projected future that pivots around an inevitable (though also largely undefined) societal collapse, his four terms lack the definitional malleability that would also make them useful to local, immediate presents.

In the following sections, we rework Bendell’s conceptual framework to respond to these concerns by reintroducing the present with all its complexity and uncertain futurities. In four empirical “snapshots”, each one put in conversation with one “R”, we show that *resilience* can be found in the “quiet activism” of leisure gardeners (Pottinger, 2017); how ingrained notions of private or restricted land use may be *relinquished* through less market-driven reappropriations of urban space as “commons” (Dellenbaugh et al., 2015); how novel constellations of co-living *restore* old ideas of intragenerational and communal cohabitation in the city (Dove, 2020); and, finally, how a path to *reconciliation* may be articulated through an ontological shift away from anthropocentric urban practices and planning, towards one that recognises non-human animals and plants as legitimate dwellers in the urban landscape (Hauck & Weisser, 2015). These accounts emphasise the importance of paying “attention to the creeping changes, the incremental transformation of nature and daily lives” that the Anthropocene invariably brings about (Castán Broto & Westman, 2019, p.128). Revealing both the problems as well as the potential in the current restructuring of enmeshed societal, ecological, and spatial urbanities, they point to how Bendell’s (2020) wish for a “creatively constructed hope” for the future may be found, perhaps not in an impending global collapse, but in the ordinary adaptations and local actions of the present (p.16).

A brief note on case study selection and methodology

The empirical delineation used to address the four “Rs” is intentional. Seeking to rearticulate and expand on Bendell’s framework, we have worked with empirical examples drawn from the authors’ fieldwork in Germany and Sweden. The cases have been selected for how they resonate with certain “Rs” and how these resonations adequately illustrate the transformative potential of embodied, everyday urban practices – hence the choice of the “snapshot” descriptor, rather than making claims to present a more comprehensive, ethnographic picture. This separation does not, however, imply that there are no overlaps or connections to be found between the snapshots (these will be highlighted in the text). We recognise that any urban landscape contains far more complexities and contradictions than any framework, expanded or not, may fully cover. Nevertheless, for the sake of clarity of the argument, and in respecting the integrity of the four empirical snapshots, each R is put into a dialectical relation with one specific empirical example and the associated everyday practices.

The brevity and exploratory nature of each example denote that the propositions made are not to be seen as all-encompassing proclamations. Rather, the paper is intended as both a provocation and an invitation to scholars and practitioners – beyond the geographical locations presented here – to critically assess and rework frameworks with universalising aspirations like Bendell’s, which may lack the necessary empirical grounding to appropriately sustain them when applied to present-day events. Methodologically, though the four snapshots derive from four different research projects at varying stages of completion, they all align in a shared commitment to ethnographically informed, qualitative urban research (Charmaz & Mitchell, 2007; Low 1996). All presented data has been generated through semi-structured and unstructured interviews with informants from a range of socio-demographic backgrounds² with additional participant observation and site visits where relevant and feasible.

2

Though often portrayed as such in mainstream media, our research has shown that the assumption that urban activism or ecologically conscious everyday practices are performed by a largely homogenous, most likely middle-class, group of people is many times thoroughly

Resilience

In this initial empirical snapshot, we address the first of Bendell's four concepts, resilience, through the practice of urban gardening. According to Bendell, the concept of resilience – one commonly used within climate science – engages primarily with material development and progress. This, in Bendell's eyes, is counterproductive to a future in which material progress might not be an option. In response, as part of adapting to climate change, he suggests a greater focus on the psychological aspects of resilience through reconsidering taken-for-granted or valued norms and behaviours (p. 22-23). Nevertheless, we find that this moving away from the material aspects of resilience simultaneously risks obscuring the multiplicity of resilient practices and their inherent relationship between mind and matter. In his genealogy of resilience, political scientist Philippe Bourbeau (2018) traces the concept's roots in multiple disciplines (from psychology, agriculture, engineering, and more recently the environmental sciences) and shows how it holds a multitude of definitions. Resilience, according to Bourbeau, connotes both "toughness" and "elasticity", and can be understood as the ability to absorb or recover from disturbances and reorganise with minimal loss.

Following Bourbeau, we adopt a concept of resilience that can simultaneously implicate its psychological and physical aspects. Remaining sceptical towards a dichotomous approach to resilience, as suggested by Bendell (2020, p.22), we instead engage with the elasticity of the concept – an engagement strongly supported by the findings from the empirical study of leisure gardeners in urban and peri-urban southern Sweden³. These gardeners are all seeking out more resilient methods for growing food in a response to current food systems and future climate change projections. Visiting the gardeners at their allotments in Scania, what became apparent was that changes in the physical and societal landscapes affected the ways in which the gardeners considered and adapted to climate change both psychologically and materially. In a display of "quiet activism" (Pottinger, 2017),⁴ the gardeners literally cultivated resilience through small, everyday, embodied acts – both as a form of destabilisation of an agricultural status quo and as a concrete pathway to a more sustainable future.

To make a resilient garden

One of the major issues when addressing effects of climate change is future production and access to food. Current food and agricultural systems are causing environmental and societal problems. Monocultures, overproduction, and pesticides exploit and degrade the soil and ruin natural ecosystems and biodiversity along the way (Rosenzweig et al., 2001). Moreover, climate scientists warn that changes in climate and environment will have an increasingly negative impact on food security in the future (Mbow et al., 2019)⁵.

misleading.

- 3 The empirical material we draw on in this section is part of an ongoing research project about gardening as a response to climate change, conducted by Josefine Sarkez-Knudsen. The fieldwork involves urban gardeners and takes place at urban and peri-urban cultivation sites in the cities of Lund, Malmö, and Höör in Scania, southern Sweden. In addition, data generated at Holma Folkhögskola, an adult education centre in Scania, also form part of the empirical material. The centre offers courses on gardening and agriculture and has a strong focus on sustainable forms of gardening, i.e. permaculture. Most of the projects' informants have a connection to the school as either current or previous attendants or teachers.
- 4 We borrow the term from geographer Laura Pottinger's (2017) work among seed savers in the United Kingdom, who select and save seeds to ensure biodiversity and challenge corporate control of food and seed systems. Pottinger characterises these embodied and tactile practices as "quiet activism", which stands in opposition to the common understanding of activism as vocal and antagonistic.
- 5 Food security is, admittedly, a pressing and constant issue in many societies around the world, mostly affecting vulnerable and low-income groups. Still, climate scientists in a recent IPCC report (Mbow et al., 2019) argue that climate change is worsening the situation and project

Though food security is hardly a new issue, these projections reveal the urgency in finding possible pathways to a more sustainable way of producing and accessing food. Together with a globally growing population, the agricultural industries are facing massive challenges in accommodating future demand. Consequently, as Bendell also argues (2020, p.8-9), this demands a rethinking of current food systems (Hulme, 2009). This is something that all the gardeners mentioned below were acutely aware of, guiding both their everyday actions as well as their long-term plans.

Recognising the above issues and reimagining existing systems require not only scientific and practical know-how but also a sense of curiosity and experimentation. Mats⁶, a permaculture and self-sufficiency course participant in his thirties, emphasised these two qualities as part of developing alternative strategies for a more resilient food production. Mats is experimenting with nut trees with the plan to create a nut tree orchard in the future. It is still not common practice to cultivate nut trees in Scandinavia, and only a few types of nut trees thrive in the northern climate e.g., hazel, chestnuts, walnut, and the rarer Ginkgo Biloba. Furthermore, it requires a lot of knowledge, skill, and maintenance to cultivate nut trees into an orchard that provides an adequate yield (only establishing the orchard can take a good ten years or more). Nevertheless, when established, a mature nut tree requires very little maintenance and offers yields for up to 100 years (depending on the location and species). As a result, Mats argued that the meticulous work of cultivating nut trees was “a good investment”, seeing it, in the long run, as a part of an alternative, resilient food production system for the future.⁷

Spending a decade establishing a nut tree orchard challenges contemporary Western, and particularly urban, notions of the spatio-temporalities of cultivation: how much time, space, and effort it actually takes to grow nuts, vegetables, fruits, and so on. Additionally, developing an intimate understanding of this and other aspects of cultivation practices might also be seen as an investment in future food security.⁸ Ellen, an urban gardener in Malmö (figure 1), put it this way: “I think of this as a long-term project. I want to be good at this [cultivating], and be able to produce a lot of food, at least during the summer I want to produce the food I eat. I guess I just want to grow as much as I can!”⁹ Ellen expressed a wish to “know” the food that she consumes and a desire to pursue a somewhat self-sufficient way of life. Like nut trees, growing vegetables and fruit in sufficient quantities to sustain yourself requires knowledge, practice, and experience. Regularly toiling away at her allotment in Malmö has raised Ellen’s awareness of the time it takes to grow a single vegetable. According to her, this is a process that cannot, and should not, be pushed because “things take time. We need to accept that things take time. Plants and vegetables take time.”¹⁰ As such, through her material engagement with growing plants, Ellen has gained a novel, practical as well as conceptual understanding of how to relate to food production – one perhaps more adapted to deal with our current climate crisis and impending global food insecurities.

that it will be amplified in the future.

⁶ All names of the informants in this section have been anonymised.

⁷ J. Sarkez-Knudsen - Fieldnotes, February 13, 2020

⁸ The majority of the informants cultivate according to permaculture methods. Permaculture (permanent agriculture) is a resilient design system that aims to create an agricultural system that meets human needs without exploiting natural ecosystems and resources (Centeri, 2019; Holmgren, 2002).

⁹ J. Sarkez-Knudsen - Field interview, Ellen, June 2020

¹⁰ J. Sarkez-Knudsen - Field interview, Ellen, June 2020



FIGURE 1 Urban gardening in Malmö

In sum, what the urban gardeners come to realise through the planning and practice of gardening itself is that cultivating an allotment, or an orchard, requires attention and care, week after week, season after season. In the way the slowness of gardening stands in contrast to industrialised farming and food industries, it may be understood as a form of unassuming, or “quiet”, activism that questions the speed and distance of dominant food systems (Pottinger, 2017). Though perhaps small in scale, urban gardening challenges the fast-paced, large-scale food systems that supply urbanised lifestyles but equally distort the temporalities of cultivation, such as those experienced in everyday urban gardening practices. The practices bring to the fore that “everyday life remains shot through and traversed by great cosmic and vital rhythms: day and night, the months and the seasons, and still more precisely biological rhythms”, in the words of Henri Lefebvre and Catherine Régulier (2004, p.73). Becoming (re)accustomed to, and accommodating for, temporalities other than those of Western-made mechanical time thus equally question the anthropocentric boundaries of this temporal construct (Jones, 2011). As such, a resilient future may be one that acknowledges and raises the ontological properties of urban plants to a level that equals or transcends the human ones –something we will return to in detail in the final R (*reconciliation*). What is more, in order to cultivate a resilient garden of a both material and psychological kind, particularly in dense urban environments, you need not only to adapt to alternative ideas of time but also of space. In the second of Bendell’s “Rs”, *relinquishment*, we consider what it means to give up on ingrained notions of land ownership and usage, in favour of embracing the urban commons.

Relinquishment

The *relinquishing* aspect of the Deep Adaptation framework proposes that people and communities should do away with possessions, convictions, and practices that fuel Bendell’s supposedly impending socio-ecological collapse. Mostly, the term comes with ascetic and frugal connotations, and this is also how Bendell

seemingly employs it. Yet, instead of a concept built on renunciation, we propose that it can equally be read as a more freeing, less disciplined “letting go” that allows for both ideas and materialities to be approached and developed in different, less socio-ecologically disastrous ways. Seen in this light, relinquishment becomes an intriguing and important notion to “think with” when considering alternatives to the present-day appropriation and development of urban space (particularly as the construction industry remains one of the primary sources of atmospheric CO₂ pollution [see Global Alliance for Buildings and Construction, 2020]). There are few spatial practices that more succinctly question how to let go of dominant, Western ownership and land-use structures than “commoning”. In 1990, political scientist Elinor Ostrom published the design principles of successful common property management in the influential *Governing the Commons* (1990). Since then, by drawing on Ostrom’s principles, the concept of the “urban commons” has been particularly tried and tested in spatial approaches incorporating post-growth concepts, common good economies, and forms of cooperative organisation (Dellenbaugh et al., 2015; Helfrich, 2014).

That being said, we are wary of approaching the concept of the commons as a panacea for urban spatial, social, and ecological inequalities. As historian Daniel R. Curtis’ exposé of the equitability of medieval commons concludes, the “powers [of said commons] were entirely dictated by the social context, and dependent on the layers of power and social relations on top of which they were placed” (2016, p.658). This emphasises the notion of approaching the commons as a verb, as a relational activity, rather than a static asset (Linebaugh, 2008, p.79). Accordingly, we understand “commoning” as a means to democratically renegotiate, at once, spatial practices and economic processes towards more sustainable societies. In Berlin, the site of our second empirical snapshot, a plethora of spatial commons practices point to a range of ways to expand Bendell’s idea of relinquishment – both in ideas of restricted property rights and the material land itself. In their plurality, the city’s urban commons practices emerge as forms of everyday, open-minded resistance. Commoning thus positions relinquishment as part of a resistance that does not imply a complete rejection of current urban land uses and rights, but rather encourages productive reinterpretations and transformations of prevailing urban conditions. Here we home in on two cases that highlight how commoning and the notion of the commons balance these multiple expressions of relinquishment in the German capital.¹¹

To let go of the private - commoning for urban spaces

The present urban fabric of Berlin is an example par excellence of how commoning not only engages with the materialities of unused or reappropriated land, but also represents a process in which dominant ideas of property and work management are relinquished and reimaged to fit new socio-political and ecological realities. In post-reunification Berlin, by being willing to relinquish widespread ideas of private interest and short-term profiteering, urban citizens engaged in diverse commoning projects developed alternatives of common ownership and flat hierarchies as their praxis. Potentially gaining much more than they “lose” when forgoing a dominant, for-profit structure, the committed work of activists and civil society lies at the core of these urban practices – stretching from real estate commoning projects such as artist collective ExRotaprint (Brahm & Schliesser, n.d.) to urban gardening initiatives like the Gemeinschaftsgarten Moritzplatz (Common Grounds, 2020).

11

The Berlin snapshot is drawn from Flavia Alice Mameli’s extensive research on the city’s commons and open spaces.



FIGURE 2 Park am Gleisdreieck

One of the city's most striking examples of urban commoning is the wasteland-turned-park story of the Park am Gleisdreieck. A former railway area in the centre of Berlin, Gleisdreieck was redeveloped in the 2000s to a much-used, prize-winning "citizens' park of the 21st century" (Grosch & Petrow, 2015, p.6). Caught in the geo-political stalemate between West Berlin and East Berlin in the post-war years, the disused railway yard became a 60 hectare urban industrial wasteland closed off to the public on both sides of the wall. It was successively reappropriated by ruderal vegetation and informally used by more adventurous West Berliners. The fact that the area was not consumed by West Berlin's automotive infrastructural expansions of the 1970-80s, nor during the reunited Berlin's building boom in the 1990s, is the consequence of four decades of resistance by local citizens. Many of these citizen activists had been using the wasteland as an informal recreational common and used their intimate, everyday knowledge of the space to argue for it to be safeguarded from a redevelopment that would deny both a human public as well as non-human animals and plants their rights to the space (Lachmund 2013). After moving to a West Berlin street close to the wasteland in the early 1980s, one activist recalled how he and his flatmates,

...always went for walks at Gleisdreieck, it was an adventure playground. We would climb over the wall from the Schöneberg side and walk across the area from there. The railway workers often told us off, but they never did anything. ... We weren't really aware of what was special about the area, it was just fun to walk around and explore. At that time, there were a lot of people out and about. We used to give each other the wink - everyone knew that everyone else was also there illegally (Lichtenstein & Mameli, 2015, p.155).

Over the decades, these locals formed activist groups (such as BI Westtangete and the Arbeitsgemeinschaft Gleisdreieck among others) which drew on a blend of political, legal, scientific, and social means to make their case, successfully adapting the strategies to the changing times but always grounding them in the everyday, civil engagement that they had with the wasteland. As another activist put it: "Generally, I believe that we have achieved quite a lot. That the whole park would not have been built if not for the commitment of the citizens..." (Lichtenstein & Mameli, 2015, p.155). Today, the Park am Gleisdreieck sports over 30 hectares of green open space always accessible to the public, providing a green "bridge" between previously divided city districts (figure 2). What is more, from an ecological viewpoint, the park is part of the north-south green corridor ("Nord-Süd-Grünzug") of Berlin, which connects multiple green spaces, providing a much-needed infrastructure for urban non-human animals and plants to move in and out of the city. The successful commoning effort of the Park am Gleisdreieck, which at least for now has saved an exceptional socio-ecological urban landscape from the threat of private interests and redevelopment, has set an example for what can be achieved in the city.

Nevertheless, as argued earlier, urban commoning needs to be approached as a continuous becoming of everyday practices rather than a static spatial fix attained at a specific moment in time. What the cases in Berlin show is that the relinquishing of certain material and societal structures simultaneously calls for the insertion of other values, practices, and subjects to replace what has been "let go" of - something that remains considerably lacking in Bendell's account. In the case of the Park am Gleisdreieck, this replacement partially relies on more highly valuing ontologies that go beyond the human - weaving the ecological tightly with the political and social intentions of the activist groups' commoning practices. This entwinement is clearly visible in our second, more recent, case: the citizens' initiative 100% Tempelhofer Feld. The initiative is committed to the preservation of the 380 hectare open space of the old Tempelhof airfield, which presently provides the locals with a vast common space to do sports, socialise, garden, etc., as well as offering the endangered skylark (*Alauda arvensis*) nesting places in the tall grasses (Grün Berlin, n.d.). Drawing inspiration from previous local activism, the initiative has defended the site as a vital urban space by emphasising its simultaneously ecological, recreational, and cultural-historical values (100% Tempelhofer Feld, 2020). Yet, though the initiative seems to have a majority of Berliners on its side - in 2014 they called, and overwhelmingly won, a referendum on the matter - the pressures to at least partially redevelop the inner-city area remain.¹² This pressure has resulted in a continuous and evolving engagement with the site on the part of the activists, who in their commoning practices need to be constantly alert to political shifts and planning policies.

The uncertainties around the Tempelhofer Feld show how, though the integration of commons-based initiatives is increasingly required in planning theory, it remains a struggle to implement them in practice. The human geographers Samuel Mössner and Lelina Kettner found that, contrary to what the traditional neoliberal criticism implies, administrative apparatuses are not necessarily adversely inclined to commoning practices (Kettner & Mössner, 2020). It is rather that, within the framework of routine administrative action, these kinds of initiatives are often marginalised. As emphasised in the above examples, the intimate, present knowledge of an area or community structure, gained through the everyday engagement with such space, forms a vital part in propositions on why and how to relinquish ingrained notions of ownership

12

Most recently, the Free Democratic Party (FPD) proposed to build 12,000 new apartments on the former airfield in what 100% Tempelhofer Feld calls a blatant move to attract voters in the upcoming 2021 election (100% Tempelhofer Feld, 2020).

and usage of space. Ultimately, ideas situated around the commons and commoning function as outlines for how a self-determined and ecologically responsible society may come into being. A relinquishing of urban space through commoning is a constant renegotiation of ideas, rights, and materialities in which, in order to successfully let go of the “old ones”, an intimate knowledge of the land you want to “common” is a prerequisite. What is more, just like we saw in our reworking of Bendell’s *resilience*, our notion of relinquishing also partially relies on valuing ontologies that reach beyond the human urban dweller. What is intriguing about these urban commoning practices is that they propose structural solutions in which the spatial demands of humans and other-than-humans in the city are not put in opposition to each other but instead are seen as co-creators of a sustainable present, as well as potential futures. This glaring blind spot of Bendell’s – his difficulty in imagining a deep adaptation that does not solely pivot around articulately human actors and actions – will be addressed in the final section of this paper. Before this, however, we move away from Berlin’s public domain to explore what may happen when old ways of communal living are restored in the city’s more “personal” spheres.

Restoration

Bendell’s third key concept, *restoration*, argues for the return to earlier, more sustainable ways of living (2020, p.22). Deeming our Western lifestyles as untenable in their current extractive and exploitative forms, he calls for a revival of past ideas of how to organise and approach housing to ensure a remotely liveable planet for coming generations. Nevertheless, as we have emphasised throughout this text, when focusing on situated, everyday urban practices we discover that such “older” notions are already being tested and reworked for contemporary lifestyles. In the empirical example below, we will see how ideas of intragenerational cohabitation in Berlin may form one such part in a larger readaptation of former means of living for, so to say, new ways of life.¹³ Throughout the history of humankind, an extended sharing of living space has been the norm rather than the exception. For instance, in pre-industrial Northern Europe, a household generally consisted of a large constellation of intra- and intergenerational family members and a large number of servants (Egner, 1976, p.281). These arrangements changed drastically with the Industrial Revolution and the increasing urbanisation of Europe. With it, living on your own or in smaller households progressively became common practice (Fedrowitz & Gailing, 2003, p.21). The 19th century already saw reactions against this change in societal constellations, with utopian ideas being formulated for urban housing developments that were to encourage a return to a more collective way of life (Bertels, 1990, p.8). Nevertheless, the dominant mode of habitation in 20th century Germany remained that of a nuclear family household (Fedrowitz & Gailing, 2003, p.23). In conjunction with the post-war student movements of the late 1960s and early 1970s, which sought to break out of old civic conventions, so-called “Kommunen”¹⁴ were established to protest old structures and habits (Bookhagen, 1969).

Nowadays, shared urban living arrangements do not so often spring from political convictions as from the pragmatic issue of housing shortages in sought-after urban areas – Berlin, the field city of our empirical snapshot, again being a prime example of this. Yet, beyond such immediate practicalities, as we will see below, these arrangements may also display a wish to “live differently” in terms of societal norms. Ricarda Pätzold (2019) at the German Institute of Urban Affairs defines collective living as a conscious decision to

¹³ Once again, we want to make clear that this is a highly contextualised reflection, focusing solely on the historical, social, and cultural setting of Northern Europe.

¹⁴ The “Kommune” was conceived of as a place where like-minded individuals (not necessarily related or romantically involved) lived together autonomously in a house or flat as part of a group.

commit to, and live within, a community structure other than the nuclear family. As such, collective living also differs from a standard house share, which is usually founded on a much more temporary, and socially less committed basis (Pätzold, 2019, p.175). What is more, according to Pätzold (and resonating strongly with the concerns of the resilient gardeners in section one), the turn to collective living also reflects the growing awareness of and concerns regarding the causes and effects of climate change, with individuals, couples, and families rethinking their living arrangements to lower their everyday environmental impact (2019, p.176). Most interestingly, as the following empirical snapshot highlights, even in situations in which restoring “old” approaches to everyday life and collective housing might not originate in climate concerns, this move towards another kind of living may trigger the environmental consciousness and behaviours that Bendell sees as essential for future human survival.

To reimagine the intragenerational household

During a recent fieldwork stint in Berlin, we spoke to two young families – Laura with her partner Dominik and their toddler Henri, and Laura’s sister, Lisa and her partner Carl with their baby Pauline – who together had formed a newly-constituted, collective household.¹⁵ On the first of January 2021, during the peak of the second pandemic lockdown in Germany, the families had moved in together in a large apartment in Berlin. After spending many years in other German and European cities, Laura and Dominik had moved to the city about a year before and, when Lisa and Carl also sought to relocate there, the couples had been looking to rent or buy separate properties near each other. When their individual flat searches remained unsuccessful, the two sisters brought up the idea of moving in together. The idea had sprung from the common dream of living in a community, as a big family, in which their children could grow up together. This morphed into more specific discussions of how to share a household and what practical requirements were required from the flat itself. Larger flats with both open, shared spaces as well as more private nooks are rarely found on the Berlin rental housing market. In the end, the sisters narrowed their search to five-plus-room flats and finally, they told us, they found a 220-square meter apartment for rent deemed large enough to fit both families.

What had started as a somewhat spontaneous experiment thus quickly became a solidified endeavour. And though the initial grounds for moving in together had been predominantly social, as Pätzold noted above, even after cohabiting for only a month the household had noticed how the set-up had had an encouraging effect on reducing the use of natural resources in their everyday lives. As Laura put it,

*Honestly, I don't think it [climate consciousness] was the main reason why we moved in together. But it has been a pleasant side effect and I think we all have benefitted from it. We are washing our laundry together and sharing everything in terms of household items. For example, we [Laura and her partner] did not own a fridge [before], now we are sharing one. However, we have three washing machines now standing in the storage [space], but we use just one. We should think about giving some away, as we don't need them in the shared household!*¹⁶

Aside from the obvious material aspects, the intragenerational collective recognised several changes in their daily habits. They found that co-living affected their self-perception as well as their awareness of their climate footprint both as individuals and as a group. Laura, who has the overall responsibility for the laundry, noted that she uses the washing machine as often as before when there were only three of them, with the main difference being that the machine is now always full. As they are all sharing the bills for amenities, Lisa also tells how they all have become much more aware of how they use resources in their daily lives:

¹⁵ The interview was conducted by Franziska Polleter as part of her ongoing doctoral research on collective housing in Germany.

¹⁶ The interview was conducted by Franziska Polleter as part of her ongoing doctoral research on collective housing in Germany.

how they consciously regulate the temperature for the whole flat depending on the use of the room, or that everyone takes a quick shower as they just have one proper bathroom. Moreover, Lisa hopes that this will have a positive effect on the children as they grow up in a household with a stronger awareness of the use of resources.¹⁷

These unassuming yet beneficial adjustments to everyday practices, described by the sisters, are supported by architect Caroline Dove's (2020) recent study of multi-generational housing projects. Just like the experience of the Berlin household, Dove sees that shared households bring about many other positive effects besides the social ones, such as health benefits, financial savings, as well as a significant reduction of greenhouse gas emissions and a household's general ecological footprint (see also Treeck & Ambach, 2019). This observation is backed up by Lisa's partner, Carl, who recounts how sharing groceries and preparing and eating meals together saves a lot of time and energy, while reducing food waste.¹⁸ Nevertheless, this does not mean that the social aspect of merging the two households is any less important to a climate-conscious future. As we have hinted at above, the families' decision to live together can be understood as a "rediscovery" of historical socialities of everyday life – playing into Bendell's (2020) proposal that the restoration of past social practices can help us to weather storms of the future (both figuratively and literally). This is also true in the present, in the form of the pandemic "storm" that the collective household was facing. Even though it was still early days for the new household, they had no regrets about their decision to move in together during such a turbulent time. In fact, the conviviality of the shared household was helping them all to cope during another national lockdown.¹⁹

To conclude, what the families were experiencing was not solely a rose-tinted restoring of "old ways" of living à la Bendell but rather, echoing Bourbeau (2018), a more elastic rearticulation of these practices to suit a turbulent present. The everyday practices of the cohabitants illustrate how collective housing may provide a solution both to the "need to overcome isolation, and [the] demand for sustainable lifestyles today and [in] the future" called for by environmental psychologists Dick Vestbro and Liisa Horelli (2012, p. 331). Nevertheless, the experiences of Lisa, Carl, Laura, and Dominik also hint at the structural changes needed to budge the deep-seated onus of nuclear families in European cities. For instance, the couples recalled the difficulties they encountered during their search for a suitable flat. For one, the current housing market in Berlin has very little to offer in terms of apartments of the size and typology that comfortably suit collective living arrangements. Secondly, both landlords, and society at large, still display a bias against co-living alternatives. In fact, the couples had to fib a little bit to get invitations to see potential flats, having several times been rejected at the application stage due to their cohabitation idea. Consequently, just as in the previously addressed *resilience* and *relinquishment* cases, the change encouraged by *restoration* pushes material, structural, and conceptual boundaries in urban space. The everyday changes made by those humans reconsidering and experimenting with alternative ways of urban living play an essential part in engendering this change. Nonetheless, in the fourth and final section we propose that to move towards a truly transformative "adaptation" of urban space in the Anthropocene, these boundaries, and Bendell's framework with them, need to be pushed even further. And to do so we have to *reconcile* with a necessary ontological shift that goes far beyond the human.

¹⁷ F. Polleter - Field interview, Lisa, January 2021

¹⁸ F. Polleter - Field interview, Carl, January 2021

¹⁹ F. Polleter - Field interview, Laura, January 2021

Reconciliation

The final part of our empirical interrogation deals with the fourth “R” of Bendell’s conceptual framework, *reconciliation*. As has been hinted at throughout the text, this R is perhaps the most all-encompassing of the four, relating in one way or another to all the previous empirical snapshots. First, resilience in urban gardening relies on learning from and appropriately adopting the alternative temporal qualities and adaptive strengths that urban ecological constellations afford. Second, the *relinquishing* of the onus on private property and the embracing of quotidian activities of commoning also questions the anthropocentric, extractive claim to superiority that this form of “modern” society is invariably built upon. Third, the *restoring* of earlier practices of cohabitation to enable more sustainable human urban dwelling also calls for re-examining the ways in which we have been living, not only with other humans but equally in tune with the temporal rhythms and spatial demands of other-than-humans.

An addition to the revised 2020 version of the original paper, reconciliation is also the least developed of the four terms. Simply put, Bendell uses the concept to argue that humanity must make peace with its own mortality and ultimate demise caused by the impending social collapse and climate crisis. Yet, once again, he leaves it to the reader to untangle what this rather bleak statement may mean in practice. Embracing this liberty of interpretation, we want to introduce a less sombre, but nonetheless existentially challenging, path of reconciliation. Such a path is predicated upon an ontological shift, away from anthropocentric urban practices and towards those that recognise non-human animals, plants, fungi and so forth as valued residents and legitimate agents of any urban landscape. A navel-gazing focus on how to reconcile ourselves with our own mortality only works to further the anthropocentrism that has put “us” in the current climatological predicament in the first place. Instead, to borrow environmental philosopher Val Plumwood’s (2002) much-used expression, what we truly need to reconcile ourselves to is “our ecological embeddedness” (p.3). Echoing the various indigenous ontic-epistemic approaches increasingly addressed in planning theory elsewhere in the world (see, for instance, Cooke et al., 2020), our reinterpretation of Bendell’s concept aligns itself with Donna Haraway’s (2015) proposition that to “make kin” with other-than-human beings is both the ultimate challenge and the definitive redemption that humanity is facing today.

For Haraway and many other multispecies scholars with her, it is in the everyday encounters and intimate more-than-human interactions that recognition and acceptance of subjectivities beyond the human may be cultivated – that is, where the foundation for humanity’s ontological reconciliation with the living world around us is being laid (Tsing, 2012; van Doreen et al. 2016). A niche branch of urban landscape architecture has kept such expanded notions of agency, embodiment, and spatio-temporality of plants at the forefront of their practices for many decades.²⁰ More recently, a growing number of urban social theorists (Metzger, 2015; Mubi Brighenti & Pavoni, 2020) and practitioners (Hauck & Weisser, 2015) have sought to include, and actively build for, animals in urban landscapes. Yet, as environmental sociologist Jens Lachmund (2004) observes, “[a]lthough increasingly backed by global discourses and policies, ecological planning has only been successfully implemented in a limited number of cities” (p.242). Our recent research confirms that, despite the “boom” in green infrastructure investments, green roofs and walls, and the like, many “conventional” planning practices still only encourage largely ecological representations and ultimately only provide a shallow engagement with the other-than-human urbanities (Rosengren, 2020a, p.147-157). In short, reconciling with this significant ontological transition in urban environments demands a shift not solely in planning theory, but also in our fundamental attunement to everyday involvement with other urban beings. The following empirical snapshot from Gothenburg, Sweden, illustrates how a slight change in everyday

20

See for instance, Cesare Leonardi and Franca Stagi’s (2019 [1983]) seasonal engagement with urban trees in Italy, Gilles Clément’s (1997) “jardins en mouvement”, gardens in motion, in France, and more recently offices such as the Atelier LeBalto in Germany.

perceptions can considerably alter the relationship between urban trees and professionals, pushing much larger boundaries of who, and what, is considered an urban subject.²¹

To learn to perceive a more-than-human urbanity

During the past decade, Gothenburg has been playing catch up to accommodate for the influx of people moving to the city. Lack of housing and inadequate commuter infrastructure has long plagued the inner-city areas and, as Sweden's second largest city prepares to celebrate its 400th anniversary (delayed by the pandemic until 2023), it is also undergoing one of its most intense construction spells since its foundation in 1621 (Caldenby, 2013, p.70). One of the most encompassing projects is the ambitious infrastructural investment, Västlänken. A new commuter underground railway system set to run below the whole inner city²² (Göteborgs Stad, n.d.), Västlänken came up against fierce criticism long before its construction began in 2018. One particularly vocal opponent was Nätverket Trädplan ("the Tree Plan Network"), a citizen activist group fighting what they deemed as unnecessary fellings of Gothenburg's mature urban trees. The city has a long history of laypeople opposing infringements on green spaces in their neighbourhoods (Rosengren, 2020b, p.232, Rosengren 2020a, p.88). What made Trädplan stand out was how it had managed to consolidate these older environmental struggles, connecting different activist groups and their localised interventions to a city-wide, politically and scientifically well-informed network of resistance.²³ Using all legal means at their disposal, loudly disputing the municipality's vision at public meetings, as well as holding vigils and strapping signs saying "Let me live!" around the thick trunks of the threatened deciduous trees²⁴ (figure 3), Trädplan were rallying against the planned felling or "dubious removal" of 500 inner-city trees standing in the way of *Västlänken* (Göteborgs Posten, 2015).²⁵

These actions publicly drove home the living connection Gothenburg's trees (some older than 200 years) forged between the city's past, present, and potential future. Here, the kernel of Trädplan's opposition was that Gothenburg's planners (of Västlänken and elsewhere) did not truly consider the ontological needs of the trees to thrive in the city. What is more, in their way of being "between immediately mobile mammality and relatively immobile geology" (Ryan, 2012, p.108), the trees' fates were felt to intersect with previous urban mismanagement and displacements of working-class communities still keenly felt by many citizens.²⁶ In defending the trees, Trädplan had thus become an "ecological killjoy" of Gothenburg's planning visions – making visible and validating urban beings of predominantly ignored socio-economic or ontological standing, while poking holes and exposing injustices in dominant anthropocentric notions of

21 The empirical data that we draw on here is derived from Mathilda Rosengren's year-long doctoral fieldwork in Gothenburg, Sweden, in 2016-17. The research formed part of the European Research Council funded project Rethinking Urban Nature based at the University of Cambridge.

22 Gothenburg's present public transport system predominantly consists of overground trams, trains, and buses.

23 M. Rosengren - Semi-structured interview, Trädplan member & founder, January 2017

24 M. Rosengren - Semi-structured interview, Trädplan member & founder, January 2017

M. Rosengren - Semi-structured interview, Member of Trädplan & local organisation, February 2017

M. Rosengren - Participant Observations, Public meeting "Flytta stora träd" (To move large trees), City of Gothenburg's "Show room", September 2017

25 Though never confirmed by the municipality, the fact that they at all decided to undertake the costly and never-before trialled moving of hundreds of trees (to other parts in the city or to rural nurseries to then be replanted after the construction work was done) instead of just felling them, which seems to have been the initial plan, is a testament to the tenacity of the members of Trädplan.

26 M. Rosengren - Unstructured interview and site visit, Trädplan member & founder, May 2017

urban progress.²⁷ These disturbances were not taken lightly by the municipality, with Trädplan portrayed many times as tiresome troublemakers. Yet, many planners and landscape architects also displayed a great deal of empathy, if not for the activists themselves, then at least for the urban trees.²⁸ Their affective relationship to trees was discussed in the breaks of many a meeting, with a landscape architect once joking: “If you, as a child, cry at the felling of trees, then you become a landscape architect later [in life]”, their colleagues nodding in agreement.²⁹ And, during a televised evening news report in February 2017, a municipal worker being interviewed exclaimed: “I didn’t even see the trees before I started [working for Västlänken]. Now they are everywhere!”³⁰



FIGURE 3 “Let me live!”

-
- 27 Feminist scholar Sara Ahmed’s (2010) “killjoy”, most well-known in its feminist incarnation, is someone who objects to a “collectively invested form of life” (such as the patriarchy) by pointing out the failings of such a system and who is consequently seen to be disturbing the collective peace by forcing this clear-sightedness on others. For an in-depth discussion of the expanded notion of the killjoy used here, with the urban nature activist or scientist as an “ecological killjoy”, see Rosengren, 2020a, pp.232-266.
- 28 M. Rosengren - Participant Observations, Urban Planning Meetings, Gothenburg City Planning Office, December 2016, January & February 2017
- 29 M. Rosengren - Participant Observations, Urban planning meetings, Landscape architecture office, December 2016
- 30 M. Rosengren - Field notes, Municipal employee, Rapport [TV evening news report], Gothenburg, Sweden
-

In sum, though municipal workers, planners, and architects had most likely encountered plenty of trees in Gothenburg before, thanks to Trädplan's persistent protests, they began to sense their ontological status in the cityscape – they suddenly *saw* them. From their own accounts, this had clearly produced some form of shift to their approach to the trees themselves as well as in their perception of the immediate urbanity around them. The professionals were thus in the process of attuning their present, largely anthropocentric practices to the more-than-human urbanity that now unfolded around them in their everyday movements through the cityscape. Though perhaps a minor, personal change, this shift could be seen as a first, tentative step toward “making kin” with the urban trees (Haraway, 2015). Our proposition, then, is that *reconciliation* may lie not in the exclusion of humanity from a post-collapse future, as argued by Bendell (2020, p. 23), but in the inclusion of other ontologies and epistemologies, beings, and belongings. It constitutes an active “bringing back together” of a world in which being human is but one of many subjectivities. A pursuit that, in practice, may very well start with the noticing of one particular urban tree.

Conclusion

Functioning as constructive provocations to Bendell's doomsday prognosis of an impending socio-ecological collapse, our four empirical snapshots allow for glimpses into how the socio-spatial practices of commoning, co-living, and activism may be fruitfully reconsidered for the urban Anthropocene. Practically, they show that the keys to possibly avoiding Bendell's collapse can be found in unassuming, yet nevertheless important, everyday actions in urban spaces. In this, each urban environment offers situated expressions of adaptations tied to its specificities, with each embodied act's unique mix of social, historical, cultural, political, and ecological facets defining the “everyday”. Simultaneously, however, we can also discern some more overarching propositions for the future in these empirically grounded accounts. In homing in on everyday embodied urban practices – be they in the form of gardening, commoning, co-habiting, or advocating for other-than-human beings – we discern how they may become the precursors to the fundamental changes, or “deep adaptations”, required to sustain human and other-than-human life on planet Earth. Here then, in borrowing from Michel de Certeau's (1988) musings on ordinary life³¹, “everyday practices, ‘ways of operating’ or doing things, no longer appear as merely the obscure background of social activity” (p.xi). Instead, they surge to the fore, illustrating in practical terms how seemingly unassuming human and other-than-human actions and relations come to alter or retain urban landscapes on public and private, local and global scales. In highlighting these urban adaptations and agencies, we have pointed out both the potentialities and shortcomings of Bendell's universalising framework of *resilience*, *relinquishment*, *restorations*, and *reconciliation*. Particularly exposed are the anthropocentric limitations that seemingly define Bendell's concept. These limits of imagination restrict the agential capacities, of humans and other-than-humans alike, needed to tackle the framework's intended outcome: to produce and maintain a “creatively constructed hope” to assuage Bendell's impending societal collapse (2020, p.16). Geographer Lesley Head (2016) emphasises the proactive trait of acting as she, like Bendell, attempts to construct hope in the middle of a climate crisis. “Hope [in the Anthropocene] is practised and performed,” Head notes, “it is a sort of hybrid, vernacular collective worked out in everyday practice and experience” (p.90). In light of our empirical examples, perhaps this definition of hope, which has “acting” rather than “collapse” as its defining feature, would be more fruitful to adopt than Bendell's (2020) “creatively constructed” one (p.16). Performing hope in Head's way encourages everyday practices that underpin more intimate understandings of our affective and embodied, spatial and temporal, relations with a planet of which we are all invariably a part. As such, they serve as important reminders that even in urban contexts – seemingly detached from “natural” worlds – actions may be local in their iteration yet implicitly global in their impact.

References

- 100% Tempelhofer Feld. (2020, October 3) *An der Realität vorbei - die FDP*.
<https://www.thf100.de/pressemitteilungen-der-initiative-lesen/an-der-realit%C3%A4t-vorbei-die-fdp.html>
- Ahmed, S. (2010). Happy Objects. In M. Gregg & G. J. Seigworth (Eds.), *The affected theory reader* (pp. 29–51). Duke University Press.
- Bendell, J. (2020 [2018]). *Deep Adaptation: A Map for Navigating Climate Tragedy*. IFLAS Occasional Paper 2. Revised 2nd Edition.
- Bertels, L. (1990). *Gemeinschaftsformen in der modernen Stadt*. Leske + Budrich.
- Bookhagen, C. (1969). *Kommune 2: Versuch der Revolutionierung des bürgerlichen Individuums; kollektives Leben mit politischer Arbeit verbinden!*. Oberbaumpresse.
- Bourbeau, P. (2018). A Genealogy of Resilience. *International Political Sociology*, 12(1), 19–35.
- Brahm, D. & Schliesser, L. (n.d.). *ExRotaprint Project Description*. <https://www.exrotaprint.de/en/exrotaprint-ggmbh/>
- Caldenby, C. (2013). Det är Stor Skillnad med Arkitekter i Ledningen. *Arkitektur*. 6. 70–77.
- Castán Broto, V. & Westman, L. (2019). *Urban Sustainability and Justice*. Zed Books.
- Centemeri, L. (2019). Health and the environment in ecological transition: the case of the permaculture movement. In *Making Sense of Health, Disease, and the Environment in Cross-Cultural History: The Arabic-Islamic World, China, Europe, and North America*. (pp. 309–331) Springer.
- Charmaz, K. & Mitchell R. G. (2007) Grounded Theory in Ethnography. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, and L. Lofland (Eds.), *Handbook of Ethnography*. (pp. 160–174). Sage.
- Clément, G. (1997). Jardins en mouvement, friches urbaines et mécanismes de la vie. *Journal d'agriculture traditionnelle et de botanique appliquée*. 39(2), 157–175.
- Common Grounds. (2020). *Gemeinschaftsgarten Moritzplatz Berlin Kreuzberg*. https://issuu.com/gartenammoritzplatz/docs/doku_garten_neu_issue
- Cooke, B., Landau-Ward, A. & Rickards, L. (2020). Urban greening, property and more-than-human commoning. *Australian Geographer*, 57(2), 169–188.
- Curtis, D. R. (2016). Did the Commons Make Medieval and Early Modern Rural Societies More Equitable? A Survey of Evidence from across Western Europe, 1300–1800. *Journal of Agrarian Change*, 16, 646–664.
- de Certeau, M. (1988 [1984]). *The Practice of Everyday Life*. trans. Steven Rendall. University of California Press.
- Dellenbaugh, M., Kip, M., Bieniok, M., Müller, A., Schwegmann, M. (Eds.) (2015). *Urban Commons: Moving Beyond State and Market (Bauwelt Fundamente)* (Vol. 154). Birkhäuser.
- Dove, C. (2020). *Radical Housing: Designing multi-generational and co-living housing for all*. RIBA Publishing.
- Egner, E. (1976). *Der Haushalt: eine Darstellung seiner volkswirtschaftlichen Gestalt* (2nd ed.). Duncker und Humblot.
- Fedrowitz, M. & Gailing, L. (2003). *Zusammen wohnen: gemeinschaftliche Wohnprojekte als Strategie sozialer und ökologischer Stadtentwicklung*. IRPUD.
- Global Alliance for Buildings and Construction. (2020). *2020 Global Status Report for Buildings and Construction. Towards a zero-emissions, efficient and resilient buildings and construction sector*. <https://drive.google.com/file/d/1k2X0oASPI-RUis90RdKLMkrBfalv29yW/view>
- Grosch, L. & Petrow, C.A. (2015). *Designing Parks: Berlin's Park am Gleisdreieck or the Art of Creating Lively Places*. Jovis.
- Grün Berlin. (n.d.). *Schutzzone der Feldlerche: Schutz für die seltene Feldlerche auf dem Tempelhofer Feld*. <https://gruen-berlin.de/projekte/parks/tempelhofer-feld/natur-geschichte/schutzzone-der-feldlerche>
- Göteborgs Posten. (2015, June 17). *Västlänken en miljökatastrof – utred alternativten*. <https://web.archive.org/web/20150925114747/http://www.gp.se/nyheter/debatt/1.2580201-vastlanken-en-miljokatastrof-utred-alternativten>
- Göteborgs Stad. (n.d.). *Stadsutveckling Göteborg – Västlänken*. <https://stadsutveckling.goteborg.se/vastlanken>

- Haraway, D.J. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. *Environmental Humanities*, (16)1, 159-165.
- Hauck, T.E. & Weisser, W.W. (2015) AAD - Animal-Aided Design. Projektbroschüre. Bayerischen Staatsministerium für Umwelt und Verbraucherschutz.
- Hayward, B., Salili D.H., Tupuana'i, L.L., Tualamali'i, J. (2019) It's not "too late": Learning from Pacific Small Island Developing States in a warming world. *WIREs Clim Change*. 1-8.
- Head, L. (2016). *Hope and Grief in the Anthropocene*. Routledge.
- Helfrich, S. & Bollier, D. (2019). *Frei, fair und lebendig – Die Macht der Commons*. transcript.
- Holmgren, D. (2002). Permaculture. *Principles and Pathways beyond Sustainability*. Holmgren Design Services, Hepburn, Victoria.
- Hulme, M. (2009). *Why we disagree about climate change: Understanding controversy, inaction and opportunity*. Cambridge University Press.
- Jones, O. (2011). Lunar-Solar Rhythmpatterns: Towards the Material Cultures of Tides. *Environment and Planning A*, 43, 2285-2303.
- Kettner, L. & Mössner, S. (2020). Performing gaps: Vom Verhältnis zwischen Alternativen Ökonomien und städtischer Planung in Dortmund. In B. Lange, M. Hülz, B. Schmid & C. Schulz (Eds.), *Postwachstumsgeographien: Raumbezüge diverser und alternativer Ökonomien*. transcript. (pp. 177-192.)
- Lachmund, J. (2004). Knowing the Urban Wasteland: Ecological Expertise as Local Process. in S. Jasanoff and M. Long Martello (Ed.), *Earthly Politics: Local and Global in Environmental Governance* (pp. 241-266). MIT Press.
- Lachmund, J. (2013). *Greening Berlin: The Co-Production of Science, Politics, and Urban Nature*. MIT Press.
- Lefebvre, H. & Régulier, C. (2004) The Rhythmanalytical Project. in *Rhythmanalysis: Space, Time and Everyday Life* (pp. 71-84). Continuum.
- Leonardi, C. & Stagi, F. (2019 [1983]). *The Architecture of Trees*. Princeton Architectural Press.
- Leoni, E. (2000 [1961]). Preface to Cesar Nostradamus. *Nostradamus and His Prophecies* (pp. 120-131). Dover Publications.
- Lichtenstein, A. & Marnett, F.A. (2015). *Gleisdreieck / Parklife Berlin*. transcript.
- Linebaugh, P. (2008). *The Magna Carta Manifesto: liberties and commons for all*. University of California Press.
- Low, S. M. (1996). The Anthropology of Cities: Imagining and Theorizing the City. *Annual Review of Anthropology*, 25, 383-409.
- Mbow, C., C. Rosenzweig, L.G. Barioni, T.G. Benton, M. Herrero, M. Krishnapillai, E. Liwenga, P. Pradhan, M.G. Rivera-Ferre & T. Sapkota, F. N. T., Y. Xu. (2019). Food security. In *Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems IPCC*.
- Metzger, J. (2015). The City Is Not a Menschenpark: Rethinking the Tragedy of the Urban Commons beyond the Human/Non-Human Divide. In C. Borch & M. Kornberger (Eds.), *Urban Commons: Rethinking the City* (pp. 22-46). Routledge.
- Mubi Brighenti, A. & Pavoni, A. (2020). Situating urban animals – a theoretical framework. *Contemporary Social Science*, 16(1), 1-13
- Nicholas, T., Hall, G. & Schmidt, C. (2020, July 14) *The faulty science, doomism, and flawed conclusions of Deep Adaptation*. Open Democracy. <https://www.opendemocracy.net/en/oureconomy/faulty-science-doomism-and-flawed-conclusions-deep-adaptation/>
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective*. Cambridge University Press.
- Plumwood, V. (2002). *Environmental Culture: The Ecological Crisis of Reason*. Psychology Press.
- Pottinger, L. (2017). Planting the seeds of a quiet activism. *Area*, 49(2), 215-222.
- Pätzold, R. (2019). Gemeinschaftliche Wohnformen. *APuz aus Politik und Zeitgeschichte*, 10413, 175-187.
- Rosengren, M. (2020a). *Wastelands of difference? Urban nature and more-than-human difference in Berlin and Gothenburg*. Doctoral Thesis. University of Cambridge.
- Rosengren, M. (2020b). There's life in dead wood: tracing a more-than-human urbanity in the spontaneous nature of Gothenburg. In M. Gandy & S. Jasper (Eds.), *The Botanical City* (pp. 229-236). Jovis Verlag.

- Rosenzweig, C., Iglesias, A., Yang, X.-B., Epstein, P. R., & Chivian, E. (2001). Climate change and extreme weather events – Implications for food production, plant diseases, and pests.
- Ryan, J.C. (2012). Passive Flora? Reconsidering Nature's Agency through Human-Plant Studies (HPS). *Societies* 2(3), 101-121.
- Treack, K. & Ambach, C. (2019). Das gute Leben für alle: Wege in die solidarische Lebensweise. Oekom.
- Tsing, A.L. (2012). Unruly Edges: Mushrooms as Companion Species. *Environmental Humanities*, 1, 141-154.
- van Doreen, T., Kirksey, E. and Münster, U. (2016). Multispecies Studies: Cultivating Arts of Attentiveness. *Environmental Humanities*, 8(1), 1-23.
- Vestbro, D.U. & Horelli, L. (2012). Design for gender equality: The history of co-housing ideas and realities. *Built Environment*, 38(3), 315-335.

