

Resourcing an Agroecological Urbanism: Political, Transformational and Territorial Dimensions

Edited by

Chiara Tornaghi and Michiel Dehaene

Book abstract

This book foregrounds an innovative and radical perspective on food planning, built from the perspective of agroecology, and makes the case for an agroecological urbanism. Building on state of the art and participatory research on farming, urbanism, food policy and advocacy in the field of food system transformation, this book seeks to change the way food planning has been conceptualized to date, and invites the reader to fully embrace the transformative potential of an agroecological perspective.

Bringing in dialogue the rural/urban and the producer/consumers realms the book challenges conventional approaches that see them as separate spheres, whose problems can be solved by a reconnection. The book rather make the case for moving away from a ‘food-in-the-city’ approach, typical of food planning as a discipline, towards an ‘urbanism’ perspective, in which the economic and spatial processes that currently drive urbanization will be unpacked and dissect, and new strategies for changing those economic and spatial processes into more equally just ones are put forward. The book draws on the nascent field of political agroecology and brings together: i) theoretical re-conceptualisations of urbanism in relation to food planning and the emergence of new agrarian questions; ii) critical analysis of experimental methodologies and performing arts for public dialogue, reflexivity and food sovereignty research; iii) experiences of resourceful land management, including urban land use and land tenure change; and iv) theoretical and practical exploration of post-capitalist economics that bring consumers and producers together.

Editors Bios

Chiara Tornaghi (1972) is Associate Professor in Urban Food Sovereignty and Resilience at the Centre for Agroecology, Water and Resilience (CAWR), Coventry University, UK. She has a background in Politics (Lauream, State University of Milan, 2001), and Sociology (PhD, University of Milano Bicocca, 2005) and Planning (PgCert, University of Newcastle, UK, 2006). Her research interests include grassroots contestation and reappropriation of public space, politics of urban land, political pedagogies, indigenous cosmologies and knowledge of plants as food and medicine, feminist political ecology and urban agroecology. Since 2016 she is the elected Chair of the AESOP Sustainable Food Planning group. Beside academic life, she is also an allotmenteer, a community food grower, and working towards reskilling herself in medical herbalism.

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**1 Food as an urban question, and the foundations of a reproductive, agroecological,
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C.M. DEH-TOR

In chapter 1 C.M.Deh-Tor make the case for an agroecological urbanism, a concept through which they seek to detach the way urbanization is structured from the extractive, resources destroying, food disabling logics of capitalism and neoliberal urbanism, and try to imagine an urbanism rooted in the core values of political agroecology: solidarity, mutual learning, multi-species (more than human) exchanges, environmental stewardship and people's resourcefulness. Starting from a critical review of the urban agenda of sustainable food planning and its limits, the chapter seeks to imagine a form of food planning that fully addresses food as an urban question, i.e. an urbanism that gives equal weight to the food as to housing, transport or sanitation. The chapter goes on to question the geographical status quo of food planning with its normalised separation between urban and non-urban land use, the selective nature of the urban food agenda and the disciplinary limits of planning as a discipline. Building on feminist social reproduction theory and its decolonial and post-patriarchal take, the authors offer an expanded understanding of urbanism. In conclusion the chapter explains how agroecology presents food planning with a food inclusive urban geography, an expanded urban food agenda, and a heterodox self-description of the field formerly called planning.

Keywords: agroecological urbanism, sustainable food planning, urban agroecology, social reproduction, urban questions

**2. Sharing the harvest: Transformative artful and activist methodologies for urban
agroecology**

E. VON DER HAIDE, A. M. ORRÙ, B. VAN DYCK, D. SOLOMON, M. D. UJUAJE,
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In Chapter 2, Ella von der Haide and Anna Maria Orrù, with contributions from co-authors Robin Grey, Severin Halder, Debra Solomon, Mama D Ujuaje, Barbara Van Dyck, and Deirdre Woods, give us the opportunity to reflect on how ideas of agroecology and food sovereignty are being debated and researched with the aid of experimental practices. They offer a discussion on the entanglements of materiality, social practices, critical feminist

approaches, power relations and ideas, and how these entanglements inside and outside human bodies shape the way we do research and communicate its results. Their contribution is a fundamental starting point in the reflection on scholar-activist positionalities and the potential and limitations of new emerging experimental methodologies, using performative techniques to promote reflexivity and public dialogue in food sovereignty research. New formats that aim at the generation of different science and society relationships can not only facilitate vibrant dialogues about research, but also enhance the research process itself by accessing other knowledge bases (e.g., embodied learning) by opening other forms of ‘knowledge generation’. As much as these approaches can empower, they also open up new ways of critically approaching and discussing neoliberal structures, and the commodification of spheres of life and knowledge by requiring the single researcher to be both a performer and an action researcher.

3 Commons and Commoning for a Just Agroecological Transition: The Importance of Decolonising and Decommodifying our Food Systems

TOMASO FERRANDO, PRISCILLA CLAEYS, DAGMAR DIESNER, JOSE-LUIS VIVERO-POL AND DEIRDRE WOODS

When activists and academics think and implement the agroecological transition, attention shall be paid to re-thinking and re-defining the intellectual, distributive and historical premises behind the past, present and future food systems. Rather than being static and politically neutral, food systems are socio-ecological networks that are in continuous transformation and where interactions are defined by the activities of people and the planet as much as by the ideas that legitimize certain behaviours. In the specific case of the European conventional food systems – that includes both continental Europe and the United Kingdom - today’s picture is the outcome of a series of enclosures and appropriation of lives and nature underpinned by notions of patriarchy, colonialism and that food – like any other object – shall be considered as a commodity whose production and consumption are ruled by the encounter of demand and offer and that is only valued for its market price (exchange value). In this chapter, five research-activists joined together to discuss concrete examples that show that the agroecological transition could be strengthened by the adoption of a political understanding of commons and commoning as intersectional antidotes for a just agroecological transition that rejects the colonial, patriarchal, unjust and anti-ecological premises of the mainstream food systems. Through a combination of theory and practice, history and imagination, empowerment and de-commodification, the chapter brings to the forefront those dimensions of food that cannot be monetised and valued in market terms, showing that political, imaginative and organisational power of commons and commoning can bridge the urban-rural divide, and contribute to the convergence of various movements, including agroecological urbanism and food sovereignty

4 Urban agrarian alliance building in peri-urban Rome: The pivotal role of land access in food system reconfiguration

LUCA COLOMBO, STEFANO GRANDO AND GIACOMO LEPRI

Peri-urban agriculture is receiving a growing attention in Italy, as elsewhere in Europe. New farming initiatives proliferate, combining economic returns with socio-environmental ambitions, giving rise to an increasing demand for land by both farmers and ‘neo-rural’ people. Quest for land is not just an individual endeavour. A mobilization advocating access to land took place in Rome since 2013 and triggered the city and regional administrations’ responses in the form of tenders to assign farmland units held in public hands. A case study was carried out few months after the assignments procedure

completion, to examine how this allocation of public land actually responds to the activists' goals and is capable to stimulate quality food provisioning, employment opportunities, peri-urban areas reconfiguration and the local food system reorganisation. The case study showed that food sovereignty and agroecological farming played a central role in the mobilisation, entrenching land access with short chains, organic farming and multifunctionality. Interestingly, such complementary socio-technical motivations were seen by both activists and local administrations as a way to gain citizens' consensus and represented criteria for the land lease tenders.

5 Urban agroforestry as a strategy for aligning agroecology with resilience planning initiatives

SARAH LOVELL AND JOHN TAYLOR

Urban agriculture has been promoted as a strategy for providing a wide range of ecosystem services, many of which could contribute to the health and sustainability of a city. Most of these agroecological systems, however, are dominated by annual, cultivated crops commonly found in community gardens, market farms, and residential yards. When annual cropping systems are prioritized over habitats that include trees and shrubs, they could come into conflict with other urban planning goals that seek to improve the resilience of cities. Urban agroforestry offers a transformative solution that supports production functions through the provisioning of healthy fruits and nuts, but within a perennial system that closely mimics a multi-strata forest ecosystem. When approached from an agroecological perspective, urban agroforestry could contribute to resilience planning initiatives by improving food security, climate change adaptation, and microclimate conditions. Food-producing trees and shrubs can be successfully integrated into existing and future urban green spaces, if appropriate consideration is given to the planting design and selection of species. Chicago, IL, USA serves as a case study for considering urban agroforestry applications through both retrofitting existing green spaces and planning future multifunctional landscapes.

Keywords: Ecological design, Green space, Multifunctional landscape, Sustainable agriculture, Urban ecology

6 Soils, Industrialised Cities, and Contaminants: Challenges for an Agroecological Urbanism

SALVATORE ENGEL DI MAURO

Producing food in cities presents complex combinations of social and biophysical processes. Confronting them entails developing perspectives and practices that account for both broad processes. Following an overview of agroecological approaches and the nature of urban soils, the major ecological challenges to and contributions of urban food production are discussed, with particular emphasis on trace element contamination. Technical preventive measures are described and shown to be insufficient without a grasp of the political ramifications of contamination. It is argued that this latter aspect is what agroecological urbanism can help confront more effectively, provided the perspective is firmly grounded in both social and biophysical analytical frameworks and just as firmly committed to overcome capitalist relations for an ecologically constructive egalitarian alternative.

Keywords: Agroecology, Soil Contamination, Trace Elements, Urban Soils

7 The potential of bio-intensive market gardening models for a transformative urban agriculture: Adapting SPIN Farming to Brussels

NOÉMIE MAUGHAN, NATALIE PIPART, BARBARA VAN DYCK AND MARJOLEINE VISSER

Abstract

Like many European cities, Brussels is an important spawning ground for diverse urban agricultural initiatives, including professional urban agricultural projects. This recent revival is led by neo-farmers who present a sometimes radical critique of the current food system. Nevertheless, these farmers have to cope with complicated urban contexts while establishing their professional activities. This chapter presents the results of a reflexive process aiming to critically disentangle the dynamics behind the construction of the farmers' ideal urban agriculture activity and the compromises they make. It has been carried out with urban farmers as co-researchers in a broader participatory action research project in Brussels. We start by showing why and how we have collectively reflected upon these issues, we then introduce some of the main sources of inspiration for urban agricultural projects and how they informed farming practices. We observe the emergence of a hybrid/adapted bio-intensive farming model that while prioritizing financial viability, cultivates a large variety of all sorts of vegetables and that includes soil-caring practices. We build on this to discuss the transformative potential of urban agriculture in the transition towards equitable and sustainable urban food systems. Regarding our case, we reveal a paradox between the regional institutions' high expectations of urban agriculture's contributions to a sustainable city, and a financial support system, still shaped in a 'pro-growth' mould, pressing neo-farmers towards short-term economic independence at the cost of a long-term agroecological perspective.

Keywords: urban market gardening, agroecology, trade-offs, viability, participatory action research

8 The transformative potential of agroecological farmers: an analysis of participatory food system strategies in Nicaragua and England

ELISE WACH AND SANTIAGO RIPOLL

In the context of an ecologically and socially dysfunctional food system there have been calls for 'radical' strategies for effective transformation of food systems and acknowledgement that 'progressive' and 'reformist' strategies alone will not be enough. Within the food sovereignty movement, there is also a call for producers, who have typically been marginalised in food system decision making, to have more power in shaping food systems. Yet there have been questions about whether producers of varying positionalities would develop strategies that are sufficiently radical to transform existing food systems. This paper reflects the outcomes of a participatory farmer-led research initiative in which producers from the so-called Global South (Nicaragua) and the so-called Global North (England) developed strategies for transforming their food systems. It details the framings and approaches developed by the farmers during the participatory process and demonstrates how both groups identified a concomitance of reformist, progressive and radical strategies. It also shows that farmers' framings of food system problems and proposed solutions became more radical over the course of the participatory process. This confirms that participatory processes with farmers have the potential to transform food systems to become more socially and ecologically regenerative.

Keywords: Agroecology, Food Sovereignty, Food Systems, Participatory Research

9 Conjugating Social and Solidarity Economies in Chiapas, Mexico: Redesigning food systems for economic, social and ecological virtuous circles

EMILIO TRAVIESO

In response to the need for sustainable, just, and healthy food systems, many actors are experimenting with models that combine agroecology, food sovereignty, and social and solidarity economy. This chapter explores one such initiative through the lens of economic anthropology, in order to understand the ways in which those elements are articulated to create virtuous circles between economic, social, and ecological dimensions. The Misión de Bachajón (MB) in Chiapas, Mexico, withdraws certain parts of its economy from market commodification. Land, food, natural resources, and service to the community are managed through solidarity economy. On the other hand, the MB engages the market through the coffee value chain. Here, it uses an ambitious upgrading strategy together with a social economy approach, to ensure that value from the market benefits the community and environment. Agroecology articulates the two realms of the economy, holding the model together. The MB's economic system contributes to the wider common good, both through its rural-urban linkages and through its conservation of biodiversity. However, it must seek out strategic alliances in order to survive in the midst of an adverse system. The MB's economic design can contribute to the ongoing search for new possibilities in sustainable food planning.

Keywords: social and solidarity economy, agroecology, food sovereignty, food systems, Chiapas

10 Peasant Counter-Hegemony towards post-capitalist food sovereignty: Facing Rural and Urban Precarity

MARK TILZEY

We suggest that urban agroecology, as food sovereignty, constitutes an important 'beachhead' against capitalism by addressing precarity through counter-hegemonic modes of local food provisioning. We also argue, however, that if this 'beachhead' is to be secured and widened, the 'right to the city' needs to go hand in hand with calls for the 'right to the countryside' as part of a broader counter-hegemonic movement that seeks to 'visibilize' the 'imperial mode of living' and to institute ecological sustainability and food equity as key components. In the global North this will not be easy, however. The state-capital nexus is keenly aware that it needs to placate non-capitalist classes if capitalism is to survive, and this it will attempt to do through concessions, holding out the 'carrot' of continued affluence. This it will attempt to do by means of enhanced 'resource imperialism'. How might counter-hegemonic change then come about? It is here, we suggest, that the role of the Southern precariat becomes pivotal. This is not merely through example – as counter-hegemonic social forces demanding access to land for fundamental need satisfaction across the rural-urban divide. It is also as potential agent in fomenting transitions to post-capitalism, not merely in the South but, by 'closing down' resource imperialism, and thereby disabling the capacity of the Northern state-capital nexus to co-opt counter-hegemony through the 'imperial mode of living'.

Keywords: Counter-hegemony, Food Sovereignty, Primitive Accumulation, Precarity, Imperial Mode of Living.

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INTRODUCTION. Embracing political agroecology, transforming sustainable food planning

Chiara Tornaghi and Michiel Dehaene

This book foregrounds innovative and radical approaches on sustainable food planning, built from the perspective of agroecology, and makes the case for an 'agroecological urbanism'.

Building on state-of-the-art and participatory research on farming, urbanism, food policy and advocacy in the field of food system transformation, this book aims to change the way food planning has been conceptualised to date, and to enable the reader to fully embrace the transformative potential of an agroecological perspective.

With the progressive co-optation of debates and practices dedicated to rethinking the link between planning and food systems to the services of a new wave of capitalism restructuring and expansion (see, for example, the realms of 'sustainable' development, nature-based 'solutions', green 'growth', green gentrification, and the new wave of high-tech and soil-less urban agriculture, etc.), we feel that a book that makes a radical stance and reorients the debate is needed.

In keeping in dialogue the rural/urban and the producer/consumers realms, the book also challenges conventional approaches that see them as separate spheres whose problems can be solved by a reconnection. The book rather makes the case for moving away from a 'food-in-the-city' approach, typical of food planning as a discipline, towards an 'urbanism' perspective, in which the economic and spatial processes that currently drive urbanisation will be unpacked and dissected, and new strategies for changing those economic and spatial processes into more equal and just ones put forward. In doing so, and therefore in moving from food planning to exploring new models of urbanisation and livelihoods with social reproduction and ecological considerations at their core, the book makes the case for a resourceful, agroecological urbanism.

1. How political agroecology intersects and challenges sustainable food planning

Encountering political agroecology has been a transformative experience that has inspired and steered the journey that led to this book. For a number of years, both of us (editors) have been interested in the emergence of food growing and food planning in urban contexts. We embarked upon this journey with two distinct, yet partially overlapping interests. We were looking to explore how urban food production (and the urban handling of nutrients) could become a tool to challenge and reverse planning processes that have dispossessed people from the possibility of controlling the processes and resources that shaped fundamental aspects of their lives, such as the quality of shared urban space and food allocation. We looked into how bottom-up knowledge production and knowledge sharing in relation to food growing, and the direct reclaiming of resources (land, nutrients, water) that were emerging in

relation to urban agriculture, could change the politics of urban and peri-urban land (Tornaghi, 2012a, 2012b, 2014a, 2014b, 2017; Tornaghi and Certomà 2018).

We also looked into how the expanding horizontal metropolis, which more and more looks like the destiny of ever-expanding processes of planetary urbanisation, could be amended and rendered less extractive and parasitic towards the environment, and more resourceful for its inhabitants (Dehaene, 2012, 2015). We felt the need to challenge some of the common wisdom of urban planners regarding sustainable urbanism as manifest in the compact city debate (Neuman, 2005), the urban age discourse (Burdett and Sudjic, 2007), and the persistent ‘methodological cityism’ within urban theory (Angelo and Wachsmuth, 2014). We looked at the emerging academic interest for urban food production and food planning more in general as a promising arena where to find insights and a fertile ground for these endeavours.

Some of the works that have sparked our imagination include the early publications that shaped the debate on sustainable food planning (such as Viljoen, 2005; Sonnino, 2009; Viljoen and Wiskerke, 2012; Steel, 2008), or that highlighted the new solidarities that were emerging through urban gardening (Lyson, 2004; Nordhal, 2009), the critical work that looked at the potential of urban agriculture as a form of agency vis-à-vis debate on autonomy (Hodgkinson, 2005; Saed, 2012), and food injustice (Alkon and Agyeman, 2011; Heynen et al., 2006, 2012; Dixon, 2014), and the debates on urban metabolism and nutrients sovereignty (Castan-Broto et al., 2012; McClintock, 2010; Schneider and McMichael, 2010).

Alongside our academic engagement with these debates, we were also practically involved in, respectively, urban food growing and urban planning, in our different capacities as micro-farmer/community food grower, activist, educator and consultant. These experiences contributed a critical understanding of the deep contradictions that these literatures were only partially able to address.

For example, despite the growing proliferation of urban food growing and the great satisfaction that practitioners felt from this engagement (i.e., in feeling more connected to the local community, caring for their neighbourhood or being more physically active), it was evident that from a food perspective, such as the ability to produce, share and consume food, these were more often than not highly frustrating experiences, constrained by what has been defined as the food-disabling city (Tornaghi, 2017). Urban agriculture was more distinctively a community building experience, a health promotion strategy, or a form of leisurely reconnection with nature, rather than a way to produce substantial amounts of ecologically sustainable, and socially just, food capable of breaking the dependency from the ‘food regime’ (Friedmann and McMichael, 1989). It also became clear that despite a growing number of food policy councils, some interesting evolutions on the front of municipal food strategies and food procurement, and the emergence of a food-concerned planning system, processes of urbanisation and collective ways to handle food were still subjected to the same extractive, disempowering and money-driven processes that have shaped urbanisation since the rise of capitalism: think of land speculation and the destruction of use values, and the ongoing loss of small farmers. The new “urban food” did not substantially change the mechanism for food production (still largely using ordinary artificial fertilisers and pesticides), food commercialisation (still offering farmers extortionately low prices) food allocation (with the most vulnerable populations in full employment yet still in food poverty), or the liberal approach to the (mis)management of urban land and nutrients (with individuals still allowed to use pesticides, and soil nutrients being taken away as waste). The profit driven ways in which food is extracted from farmers, allocated according to wealth or

disposed of as waste, remained largely mainstream. The discovering of food as a new topic for urban planning, and the surging of urban agriculture as a new economic realm, did not seem to lead, unequivocally and systematically, to more equitable forms of land management and just food systems. Innovations seemed to work around constituted interests, residual opportunities opened up by deindustrialisation and the largely shared approach to food as a commodity. Despite interesting emerging forms of political gardening that were challenging the agency of city making (Certomà and Tornaghi, 2015), the neoliberal urbanism we knew was distinctively a food-disabling one.

While urban agriculture remained rich in its potential to become an empowering field of practice (Alkon and Agyeman, 2011, Heynen et al., 2012), we also saw dangers in its ongoing co-optation. This was in the form of green gentrification, new market expansions under the remit of circular economies, the attempts to monetise ecosystem services, nature-based solutions, and purely technical/industrial translations of the issues at stake (vertical farming, aquaponics, etc.) functional to ongoing speculative approaches to urban land.

While a number of critical scholars started to point out these dangers (Atkinson, 2013; McClintock, 2014; Tornaghi, 2014a), as our sense of frustration within the ‘urban agriculture’ debate grew, our joint journey started with the aim of searching for a food-empowering urbanism (Deh-Tor, 2017). We did not want to give up the chance to imagine alternative urban solidarities. We felt the need to keep imagining what a radically different urbanism would look like, remaining attached to a shared commitment to the urban as a potentially emancipatory condition. Not only is the urban the condition under which, in all its varieties, half the world’s population is living, we believe that the history of urbanism is not simply exhausted by the logics of capitalist oppression that have shaped its dominant face. In the same way that the diverse economies literature (Gibson-Graham, 1996) has tried to break the spell of a totalising critique of capitalism, we feel the need to break the spell of a totalising critique of urbanism, opening our eyes to the existing diversity that contains the germ of radical alternatives.

The discovery of *political agroecology* gave us important tools to begin to question the sustainable food planning that we knew.

The term ‘political agroecology’ includes a group of practices and approaches, reclaimed and reproduced by a wide group of farmers, scholars and activists across the world. These include agricultural practices respectful of soil ecology and soil health, promoting biodiversity, recognising multi-species solidarities, cherishing horizontal knowledge reproduction, and valuing people’s knowledge and place-/culturally- sensitive practices (de Molina, 2012; Van Dyck et al., 2017; Deh-Tor, 2017). Examples of these include companion planting, care for living soils and the regenerative treatment of soil organic matter and nutrient levels, biological management of pests, skills-sharing and solidarity economies.

The attribute ‘political’ relates to the coalitions, networks, statements and movement-building through which these practices reflect on their condition and reclaim their legitimacy, vis-a-vis the aggressive neoliberal and profit-oriented approaches that have attacked, disabled and delegitimised these knowledges, and dispossessed, displaced and marginalised the people who practice them, and who find their livelihood residualised. Political agroecology strongly aligns to the food sovereignty stance against the food regime (the international trade agreements, the oligarchy controlling seeds and agrochemical inputs, and the range of policies that favour large agro-industry players over smallholders) that shapes the food system.

It calls for the urgent need to address the ecological crisis of nutrient loss, soil depletion, and climate change *at the same time* as addressing the astonishing growth of food and water insecure global (and particularly urban and peri-urban) populations, issues that most food policies address very selectively and in ways largely compliant with the capitalist interests and economies at the root of the problem. This book embraces this challenge.

The specificity of this book is not limited to adopting a political agroecology perspective when thinking sustainable food planning: it goes further and it unfolds by bringing it into the urban realm, and in doing so, contributes to shape an *urban* political agroecology (cit: van Dyck et al., 2018; Tornaghi and Halder, forthcoming; Tornaghi and Dehaene, 2020).

Given the systemic and global focus of political agroecology, the international nature of the politics and institutions that shape the food regime, the historical metabolic and epistemological rift generated and consolidated through processes of urbanisation, has also meant that translating its heuristic value for considerations on sustainable food systems has brought to light the necessity to move beyond a food-in-the-city approach or a food policy lens. It focuses on questions of urbanism and urbanisation more generally and how they shape our relationship to food.

In order to clarify the focus on urbanism it is necessary to provide a definition. In the context of the multiplication of ‘new urbanisms’, the term has increasingly been used in a variety of ways, swinging from meanings close to its French roots (the term ‘urbanisme’ and its reference to the disciplines of urban planning and design) to meanings closer to classical sociological traditions as exemplified by the classical text of Louis Wirth ‘Urbanism as a way of life’ (1937). In this book we use the term ‘urbanism’ as it emerged in critical Marxist studies in the 1970s (Lefebvre, 1974; Harvey, 1973), where it bears a sum of the two: urbanism is the (always contested) ensemble of social arrangements, lifestyles, divisions of labour, cultural practices and social solidarities that materialise and shape the urban environment through processes of urbanisation. By stressing the link between urbanism and urbanisation we wish to stress the fact that the urban context is more than just a physical space, but always the manifestation of socionatural, sociocultural and socioeconomic processes and ideas that the disciplines of urban planning and design ‘serve’.

Our first message to the community of scholars and practitioners interested in food system transformation, and the departing point of this book, is that radical transformations of the food system that seriously aim to tackle the ecological and social justice challenges at once have to consider the way in which urbanism and urbanisation are entangled with the reproduction of capitalist structures and value systems. Current urbanism tends to serve the *status quo*, alternative urbanism may contribute to food systems’ transformation.

A political agroecology informed look at the dynamics of urbanisation therefore intersects and challenges sustainable food planning in a number of ways. For example, it looks at land not as a neutral canvas on which various land use patterns can be interchangeably inscribed but views urban soils as valuable common goods. It looks at the geography of food systems as metabolically interrelated socio-ecological patterns that act across the rural-urban divide. It seeks to understand the multiple relationships of interdependence and solidarity between humans and non-humans, living ‘critters’ and inanimate things. It looks at the livelihood and the collective valuing of smallholders, and seeks to break the anthropocentric and charity charge of food.

2. Political agroecology approaches resourcing an agroecological urbanism

The contributions in this book can be seen as examples of research themes in the emerging field of political agroecology. They have been selected for their strength in thinking about transformation and political trajectories, and in this sense resourcing what we call an “agroecological urbanism” (cfr. Chapter 1).

Many of the chapters address more than one of the following themes simultaneously:

- theoretical re-conceptualisations of urbanism, food and food systems’ transformation;
- pedagogies of transformative learning and resistance;
- advocacy perspectives for merging urban and rural food justice movements;
- experiences of resourceful land management, including urban land use and land tenure change;
- landscape agroecology and urban agroforestry;
- experimental policies and practices for land access and urban soil care;
- theoretical and practical exploration of post-capitalist economics;
- heterodox economies of resistance.

We see these diverse reflections and experiences as ways of *resourcing* an agroecological urbanism from a multitude of communities and perspectives. By ‘resourcing’ we mean providing tools and ideas that can help imagining new transformative politics, building political subjectivities or strengthening activism around underestimated but crucial policy areas (i.e., soil protection). The diversity of approaches is necessary precisely because urbanisms entails the coordination of interdependency in different spheres of life, and moving beyond a capitalist urbanism requires the building of solidarity and coordination across intersectional, transdisciplinary and decolonial activist practices and knowledges.

While we discuss in more detail how the different contributions in this book contribute to an agroecological urbanism, we offer below a synopsis for each chapter.

Synopsis of the book

In this introduction we have so far given an overview of how political agroecology intersects and challenges sustainable food planning as we know it to date, which questions an agroecological perspective raises, and what innovative dimensions it entails when thinking about food system transformation. In this concluding section we now offer a detailed synopsis of each chapter in order to explain the rationale for the book and highlight the intellectual trajectory that underpins the quest for an agroecological urbanism.

In the first chapter, **C.M. Deh-Tor** make the case for an agroecological urbanism, a concept through which they seek to detach the way urbanisation is structured from the extractive, resources destroying, food disabling logics of capitalism and neoliberal urbanism, and try to imagine an urbanism rooted in the core values of political agroecology: solidarity, mutual learning, multi-species (more than human) exchanges, environmental stewardship and people’s resourcefulness. Starting from a critical review of the urban agenda of sustainable food planning and its limits, and building on feminist social reproduction theory and its decolonial, non-extractive and post-patriarchal perspective, the author discusses how urban political agroecology presents food planning with a food inclusive urban geography, an expanded urban food agenda, and a heterodox self-description of the field formerly called planning, that enables the reimagination of an alternative urbanism.

Bringing forward transformative ideas means fostering transformative learning, research and communication. In Chapter 2, **Ella von der Haide, Anna Maria Orrù, Barbara Van Dyck,**

Debra Solomon, Mama D. Ujuaje, Deirdre Woods, Severin Halder and Robin Gray give us the opportunity to reflect on how ideas of agroecology and food sovereignty are being debated and researched with the aid of experimental practices. Their contribution offers a starting point to reflect on scholar-activist positionalities, and the potential and limitations of new emerging experimental methodologies using performative techniques to promote reflexivity and public dialogue in food sovereignty research.

Rather than being static and politically neutral, food systems are socio-ecological networks that are in continuous transformation and where interactions are defined by the activities of people and the planet as much as by the ideas that legitimise certain behaviours. In Chapter 3, five research activists, **Tomaso Ferrando, Priscilla Claeys, Dagmar Diesner, Jose Luis Vivero-Pol, and Deirdre Woods**, join together to discuss concrete examples that show that the agroecological transition could be strengthened by the adoption of a political understanding of commons and commoning as intersectional antidotes for a just agroecological transition, one that rejects the colonial, patriarchal, unjust and anti-ecological premises of the mainstream food systems. Through a combination of theory and practice, history and imagination, empowerment and de-commodification, the chapter brings to the forefront those dimensions of food that cannot be monetised and valued in market terms, showing that political, imaginative and organisational power of commons and commoning can bridge the urban-rural divide and contribute to the convergence of various movements, including agroecological urbanism and food sovereignty.

In Chapter 4, **Luca Colombo, Stefano Grando and Giacomo Lepri** reflect on the politics of peri-urban land reclamation and redistribution as a tool for resourcefulness. Peri-urban agriculture is receiving growing attention in Italy, as elsewhere in Europe. The quest for land is not just an individual endeavour. New farming initiatives proliferate, combining economic returns with socio-environmental ambitions, giving rise to an increasing demand for land by both farmers and ‘neo-rural’ people. The paper reviews a mobilisation exercise advocating access to land in Rome including the 2013 response of the city and regional administration to make public farmland available. The case study showed that food sovereignty and agroecological farming were seen by both activists and local administrations as a way to gain citizens’ consensus and represented criteria for land lease tenders.

Drawing on a background in landscape planning, landscape ecology and regional food systems, in Chapter 5 **Sarah Lovell and John Taylor** review the ongoing discussion on the relevance of agroforestry within an urban context. Urban agroforestry offers a transformative solution that supports production functions through the provision of healthy fruit and nuts, but within a perennial system that closely mimics a multi-strata forest ecosystem. When approached from an agroecological perspective, urban agroforestry could contribute to resilience planning initiatives by improving food security, climate change adaptation, and microclimate conditions. Chicago, IL, USA serves as a case study for considering urban agroforestry applications through both retrofitting existing green spaces and planning future multifunctional landscapes.

In Chapter 6, **Salvatore Engel di Mauro** offers an overview of some of the major challenges urban soils can present to food producers in industrialised cities. Following an overview on soil formation, on agroecological approaches to soil, and on the specific nature of urban soils, the author discusses the major ecological challenges of urban food production with a particular emphasis on trace element contamination. Technical measures to deal with pollutants are described and shown to be insufficient without a grasp of the political ramifications of contamination. It is argued that this latter aspect is what agroecological

urbanism can help confront more effectively, provided the perspective is firmly grounded in both social and biophysical analytical frameworks and just as firmly committed to overcome capitalist relationships for an ecologically constructive egalitarian alternative.

In Chapter 7, **Noemi Maughan, Nathalie Pipart, Barbara Van Dyck and Marjolein Visser** look at neo-farmers in peri-urban market gardens and how they deal with the challenges of putting agroecological ideas into practice. The chapter offers insights into contradictory pressures and forces that need to be overcome to make radical ideas work.

Chapter 7 presents the results of a reflexive process aiming to critically disentangle the dynamics behind what the farmers' construct as an 'ideal urban agriculture activity', and the compromises they have to make while putting the ideal into practice. The study was carried out with urban farmers as co-researchers in a broader participatory action research project in Brussels. Their case study reveals a paradox between the regional institutions' high expectations of urban agriculture's contributions to a sustainable city, and a financial support system, still shaped in a 'pro-growth' mould, pressing neo-farmers towards short-term economic independence at the cost of a long-term agroecological perspective.

In Chapter 8, **Elise Wach and Santiago Ripoll**, take a closer look at the role of rural farmers (in both the Global North and South) in food system transformation. Their work starts from acknowledging the overwhelming evidence that our food systems are not currently working to nourish our populations, ecosystems, economies, or social connections. Agroecological approaches have been shown as having the potential to address many of these problems in the mainstream food system, particularly when combined with concepts of food sovereignty. The approaches localise control, and place producers and consumers at the centre of decision-making. Yet there have been questions about whether producers of varying positionalities would develop strategies that are sufficiently radical to transform existing food systems. The chapter reflects the outcomes of a participatory farmer-led research initiative in which producers from the Global South (Nicaragua) and the Global North (England) developed strategies for transforming their food systems. It shows that farmers' framings of food system problems and proposed solutions became more radical over the course of the participatory process. This confirms that participatory processes with farmers have the potential to transform food systems to become more socially and ecologically regenerative.

In Chapter 9 **Emilio Travieso** bring us to Chiapas, Mexico, to delve into the strategy of one specific group of farmers across the urban-rural divide. After regaining their ancestral lands in Chiapas from plantation owners in the 1990s, the Mayan Tseltal people, accompanied by Jesuits and other collaborators in the Misión de Bachajón, have continued to build their full sovereignty. The chapter explains how the Misión de Bachajón withdraws certain parts of its economy such as land, food and natural resources from market commodification while engaging the market through the coffee value chain. Agroecology articulates the two realms of the economy, market and solidarity economy, and holds them together. The economic system of the Misión de Bachajón contributes to the wider common good, both through its rural-urban linkages and through its conservation of biodiversity. However, it must seek out strategic alliances in order to survive in the midst of an adverse system.

In Chapter 10 **Mark Tilzey** discusses how urban agroecology, as an expression of food sovereignty, constitutes an important 'beachhead' against capitalism by addressing precarity through counter-hegemonic modes of local food provisioning. Tilzey, however, also makes clear that if this 'beachhead' is to be secured and widened, the 'right to the city' needs to go hand-in-hand with calls for the 'right to the countryside' as part of a broader counter-

hegemonic movement that seeks to ‘visibilise’ the ‘imperial mode of living’ and to institute ecological sustainability and food equity as key components. In the global North this will not be easy, as it requires nothing less than breaking away from ‘resource imperialism’. The Southern precariat, Tilzey argues, has a pivotal role in fomenting transitions to post-capitalism, not merely in the South but, by ‘closing down’ resource imperialism, and thereby disabling the capacity of the Northern state-capital nexus to co-opt counter-hegemony through the ‘imperial mode of living’.

The book **concludes** with a section where the editors project the book forward by reinstating the key pillars upon which the programmatic dimension of an agroecological urbanism is built, and by reflecting on the progress that this agenda has made since they started the journey, both in research and action.

References

- Alkon, A. H. and Agyeman, J. (eds) (2011) *Cultivating Food Justice: Race, Class, and Sustainability*. Cambridge: MIT Press
- Angelo, H. and Wachsmuth, D. (2014) Urbanizing urban political ecology: A critique of methodological cityism. *International Journal of Urban and Regional Research*, vol 39, no 1, pp16-27.
- Atkinson, A. (2013) Readjusting to reality: Urban and peri-urban agriculture to ease the downward passage. *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, vol 17, no 1, pp85-96.
- Burdett, R. and Sudjic, D. (2007) *The endless city: the urban age project by the London School of Economics and Deutsche Bank's Alfred Herrhausen Society*. London: Phaidon.
- Castan-Broto, V., Allen, A. and Rapoport, E. (2012) Interdisciplinary Perspectives on Urban Metabolism, *Journal of Industrial Ecology*, vol 16, no 6, pp851-861.
- Certomà C. and Tornaghi C. (2015) Editorial. Political gardening. Transforming cities and political agency. *Local Environment: The international journal of justice and sustainability*, vol 20, no 10, pp1123-1131.
- De Molina, M. G. (2012) Agroecology and Politics. How To Get Sustainability? About the Necessity for a Political Agroecology, *Agroecology and Sustainable Food Systems*, vol 37, no 1, pp45-59.
- Dehaene, M. (2012) *Gardening the Urban Field*. Ghent: A&S/Books.
- Dehaene, M. (2015) From the nebular city to the horizontal Metropolis. In: Uyttenhove, P., Dehaene, M., Beeckmans, L., Michelena, A., Notteboom, B., Peleman, D. and Pelger, D. (eds) *A landscape perspective on urbanism*, Ghent: Academia Press, pp71-90.
- Dehaene, M., Tornaghi, C. and Sage, C. (2016) Mending the metabolic rift. Placing the ‘urban’ in Urban Agriculture. In Lohrberg, F. Lička, L., Scazzosi, L. and Timpe, A. (eds) (2016) *Urban Agriculture Europe*. Berlin: Jovis, pp174-177.
- Deh-Tor, C. M. (2017) From Agriculture in the City to an Agroecological Urbanism: The transformative pathway of urban (political) agroecology, *Urban Agriculture Magazine*, No 33, pp8-10.
- Dixon, B. A. (2014) Learning to see food justice. *Agriculture and Human Values*, vol 31, no 2, pp175-184.

- Friedmann, H. and McMichael, P. (1989) Agriculture and the state system: the rise and fall of national agricultures, 1870 to the present. *Sociologia Ruralis*, vol 29, no 2, pp93-117.
- Gibson-Graham, J. K. (1996) *The end of capitalism (as we knew it): a feminist critique of political economy*. Oxford: Blackwell.
- Harvey, D. (1973) *Social justice and the city*. Baltimore (Md.): Johns Hopkins University Press.
- Heynen, N., Kaika, M. and Swyngedouw, E. (eds) (2006) *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. New York: Routledge.
- Heynen, N., Kurtz, H. E. and Trauger, A. (2012) Food justice, hunger, and the city. *Geography Compass*, vol 6, no 5, pp304-311.
- Hodgkinson, T. (2005) Digging for anarchy. In: Richardson, T. and Kingsbury, N. (eds), *Vista: The Culture and Politics of Gardens*. London: Frances Lincoln, pp66-73.
- Lefebvre, H. (1974) *La production de l'espace*. Anthropos: Paris.
- Lyson, T. A. (2004) *Civic Agriculture: Reconnecting Farm, Food and Community*. Medford, MA: Tufts University Press.
- McClintock, N. (2010) Why farm the city? Theorizing urban agriculture through a lens of metabolic rift. *Cambridge Journal of Regions Economy and Society*, vol 3, no 2, pp191-207.
- McClintock, N. (2014) Radical, reformist, and garden-variety neo-liberal: Coming to terms with urban agriculture's contradictions. *Local Environment. The international journal of justice and sustainability*, vol 19, no 2, pp147-171.
- Neuman, M. (2005) The Compact City Fallacy. *Journal of Planning Education and Research*, vol 25, no 1, pp11-26.
- Nordahl, D. (2009) *Public Produce: The New Urban Agriculture*. Washington, DC: Island Press.
- Saed (2012) Urban farming: The right to what sort of city? *Capitalism Nature Socialism*, vol 23, no 4, pp1-9.
- Schneider, M. and McMichael, P. (2010) Deepening and repairing, the metabolic rift. *Journal of Peasant Studies*, vol 37, no 3, pp461-84.
- Sonnino, R. (2009) Feeding the city: Towards a new research and planning agenda. *International Planning Studies*, vol 14, no 4, pp425-435.
- Steel, C. (2008) *Hungry City: How Food Shapes Our Lives*. London: Vintage.
- Tornaghi, C. (2012a) Public space, urban agriculture and the grassroots creation of new commons: Lessons and challenges for policy makers. In: Viljoen, A, and Wiskerke, J. S. C. (eds) *Sustainable Food Planning: Evolving Theory and Practice*. Wageningen: Wageningen Academic Publishers, pp349-364.
- Tornaghi, C. (2012b) Edible public space: Experimenting with a socio-environmentally just urbanism. *Territorio*, vol 60, pp39-43.
- Tornaghi, C. (2014a) Critical geography of urban agriculture. In *Progress in Human Geography* 38(4), pp. 551-567.
- Tornaghi, C. (2014b) *How to set up your own urban agricultural project with a socio-environmental justice perspective*, Leeds: University of Leeds.

- Tornaghi, C. (2017) Urban Agriculture in the food-disabling city: (Re) defining urban food justice, reimagining a politics of empowerment. *Antipode*, vol 49, no 3, pp781-801.
- Tornaghi, C. and Certomà, C. (2018) *Urban gardening as politics*, London: Routledge.
- Tornaghi, C. and Dehaene, M. (2020) The prefigurative power of urban political agroecology: rethinking the urbanisms of agroecological transitions for food system transformation, *Agroecology and sustainable food systems*, vol 44, no 5, pp594-610.
- Tornaghi C. and Halder S. (2020/ forthcoming) Reconfiguring the intersection between urban food movements and agrarian struggles: building an urban political agroecology praxis. In: B. Engels, K. Dietz, H. Akram-Lodhi and B. McKay, eds., *The Edward Elgar Handbook of Critical Agrarian Studies*. Cheltenham: Edward Elgar Publishing
- Van Dyck, B., Maughan, N., Vankeerberghen, A. and Visser, M. (2017) Why we need urban agroecology. *Urban Agriculture Magazine*, vol 33, pp56.
- Van Dyck, B., Tornaghi, C., Halder, S. von der Haide, E. and Saunders, E. (2018) The making of a strategizing platform: From politicising the food movement in urban contexts to political urban agroecology, in: Tornaghi, C. and Certomà, C. (eds) (2018) *Urban gardening as politics*, London: Routledge.
- Viljoen, A. (ed.) (2005) *Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities*. Burlington, MA: Architectural Press.
- Viljoen, A. and Wiskerke, J.S.C. (eds) (2012) *Sustainable Food Planning: Evolving Theory and Practice*. Wageningen: Wageningen Academic Publishers.
- Wirth, L. (1938) Urbanism as a Way of Life, *The American Journal of Sociology*, vol 44, no 1, pp1-24.

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Chapter 1 - Food as an urban question, and the foundations of a reproductive, agroecological, urbanism

C.M. Deh-Tor

Introduction

In this chapter we aim to present and discuss what we mean by the concept of 'agroecological urbanism' (Deh-Tor, 2017). In the introduction to the book we began by illustrating how encountering agroecology has changed our way of looking at sustainable food planning in a profound way. Here, while delving deeper into the ideas of an agroecological urbanism, we aim to unpack further how we envision a transformative agenda for the sustainable food planning community.

An agroecological urbanism – as a realm of professional practice – does not yet exist. Ours is a call for a dialogue between two sets of discussions and reflections that, until today, still largely operate in separate worlds and are rooted in very different communities of practice. On the one hand are the political agroecology and the food sovereignty movements; these largely represent rural communities engaged in struggles and negotiations at national and transnational levels to shape production and trade conditions of farmers. On the other hand is the urban food policy community that is mostly engaged in debates on urban and regional food strategies, strongly focussed on issues of food access and consumption, such as urban diets and food poverty, but lacks a radical stance on the ecological basis of food production, and the reproduction of life in general. As largely separate movements, they are rooted in very different sets of historical subjectivities and resonate with political positions that have been historically rendered as the conflict between the agrarian and the urban question (McMichael, 2013; Tornaghi and Halder, 2021; Tornaghi and Dehaene, 2020).

While our work is largely positioned in this gap and attempting to build bridges between these communities and movements, in this chapter we mostly speak to the food planning community. This chapter tries to link up to the unfolding discussion on sustainable urban food planning while trying to break open its agenda: we do this in three ways. First, we aim to inscribe food planning within a *different geography*, moving beyond the city as a self-contained world exploring the complex geometries of planetary urbanisation (Brenner, 2014) and the many concretely existing overlaps between what used to be country and what used to be city (Parham, 2019). Second, we aim to expand and open up *the thematic confines of the urban food agenda*, unpacking the logics of urbanisation that still largely contribute to maintain food as an afterthought, after the 'hard' subjects of housing, transport, and energy have been taken care of. Third, we aim to challenge *the disciplinary confines* of traditional ways of understanding planning, embracing a view that sees planning as a field in transition, rather than a singular and monolithic disciplinary basis upon which food planning is to be built.

The chapter is organised along four sections. In Section 1 we start from the way sustainable food planning has engaged with the urban food question so far, and try to map the boundaries of the

terrain that the sustainable food planning agenda was able to conquer within an urban policy context. The aim is to describe its geographical boundaries, the selective character of its political agenda, the main planning approaches followed to implement this agenda, and to begin to illustrate its limits.

In Section 2 we turn to the social reproduction literature as a forceful entry point to rethink the urban food agenda. In particular, we illustrate how the feminist social reproduction literature (Federici, 2004; Mitchell et al., 2004; Bakker and Gill, 2003; Bezanson and Luxton, 2006), has helped us to see the variety of practices that have been residualised and side-lined in a capitalist society that has built the urban question around the question of the reproduction of capital and waged labour (Castells, 1972; Harvey, 1985), rather than bodies and ecologies.

In Section 3 we then move to agroecology as a radical starting point for a new food planning agenda. The clear positioning of political agroecology helps us to map where further articulation is needed in order to creatively imagine and build an urban society that embraces and nurtures the ecological processes that feed life (and us).

In Section 4 we conclude with a call for a heterodox planning practice, and try to map some of the voices present in this edited volume within such a heterodox approach.

1. How ‘urban’ is food planning?

Over the past two decades, since the first publications calling for more attention to the food agenda, sustainable food planning has moved from “being a stranger to the planning field” (Pothukuchi and Kaufman, 2000) to become one of the issues driving the renewal of planning. The reasons for planning communities re-engaging with food are varied and have been described by Morgan and Sonnino as part of the ‘new food equation’ (NFE) (Morgan, 2009; Morgan and Sonnino, 2010). With this term, they refer to the interplay of five profoundly destabilising trends in the capitalist food system that revolve around food, and that could potentially lead to a food regime change (Friedmann, 1987): the sharp rise of staple food prices, increase in food insecurity, the link between food insecurity and national security, the effect of climate change on food production, and the growing incidence of land conflicts. Cities, as Morgan and Sonnino (2010) remind us, are at the forefront of the NFE for ecological, demographic and political reasons.

The Food Interest Group (a subsection of the American Planning Association), and the Sustainable Food Planning Group (its counterpart within the Association of European Schools of Planning or ‘AESOP’) can now look back at more than 10 years of exchange in research and teaching activities on this topic. The emergence of the field of sustainable food planning went hand-in-hand with local and regional actors engaging in the drafting of urban food plans, food strategies and, to some extent, food policies (Ilieva, 2016). Over the last decade, a growing number of cities have installed local food councils (Moragues-Faus and Sonnino, 2019); in turn, this has led to the establishment of networks of cities coming together around the urban food agenda and learning from each other, both within national (i.e., the UK Sustainable Food Cities network) and international networks (i.e., the Milan Urban Food Policy Pact).

We share the excitement for this growing attention. At the same time, however, we feel that the planning community has only started to address food as an *urban* matter of concern. The impact of this renewed attention to food is still rather limited and insufficiently integrated within a broad transformative urban agenda, i.e., an agenda for the city, urbanism and urbanisation more broadly. We believe that the work of planners needs expanding beyond the boundaries within which food has been treated so far and should be understood as an ‘urban question’, giving it the same weight and centrality that has historically been given to the housing question, mobility, or sanitation in

urbanism. The particular gaze we adopt has roots in the literature and debates on ‘urban questions’ (typically the housing questions), and the ways in which planners’ social movements and governing authorities have negotiated issues of social reproduction and collective services in the past century. We first take stock of the ways in which the city has been conceptualised within food planning, then explore the frontiers of an expanded urban agenda.

1.1 Multiple versions of the city in urban food planning

As mentioned above, Morgan and Sonnino (2010) have pointed out that after half a century in which faith in the industrialisation of agriculture made it seem as if the issue of feeding people had been resolved, food has regained centre stage in the international arena. Wiskerke (2015) identifies five urbanisation challenges to which urban food planning has responded:

- (1) governance capacity, especially given the new sustainability challenges;
- (2) resource use;
- (3) growing inequality;
- (4) environmental pollution; and
- (5) food provisioning for a growing urban population.

Each of these challenges has led to different ways in which the food planning community has engaged with the urban context. Building on these analyses and emerging debates, we can identify the following ways in which the city and food planning intersect.

The city as a distinctive level of governance: the rise of urban food councils and alternative food networks

While in the post-war period food was dealt with largely at the national and supranational level (through trade agreements and price control policies, including subsidies, for example), in the past 30 years the city has re-emerged as a distinct level of governance for the food system. Moragues-Faus and Sonnino (2019) describe the rise of food policy councils since the establishment of the first council in Knoxville, Tennessee in 1982. The experience of this growing number of cities has led to the emergence of city-to-city exchanges, and city-to-city learning, and is now also available as a rich resource for the empirical analysis of urban food governance (Baker and de Zeeuw, 2015). Food planning in this context is looked at as a specific subject of local and metropolitan governance. The intersections with the urban planning literature are many. Food planning has been analysed as a form of multilevel governance, calling for horizontal and vertical policy integration (Ilieva, 2016). It has been analysed as spaces of hybrid governance and social innovation (Manganelli and Moulaert, 2019), as a new form of regional metropolitan governance, etc. (Wascher et al., 2015). While these new policy arrangements have been celebrated by many, they have also been questioned as symptomatic of a techno-managerial and post-political form of climate governance (Kenis and Lievens, 2014; Swyngedouw, 2010).

The city as a multiscalar territorial entity: reterritorialisation and the rural-urban continuum

The relative neglect of food in the history of urban planning until the mid-1980s is partly explained through the historical physical and mental separation of town and country. Food has been treated as a question of agriculture and constructed as belonging to non-urban territories (Sonnino, 2009; Cabannes and Marocchino, 2018). Many voices have pointed to the region as the preferred geographical entity to rebuild urban-rural linkages (Kneafsey, 2010; Cohen, 2010; Forster and Getz Escudero, 2014; Wiskerke, 2015). Research has shown great differences in the structure and make-up of the geographical area upon which cities rely (Zasada et al., 2019). However, the concept of urban agriculture has reconnected actors on both sides of the urban-rural divide (Viljoen, 2005) and has actively explored opportunities to integrate food production within the urban context. Designers

and planners reimagined the possibilities of reconnecting open spaces along the urban transect (Duany, 2012) into Continuous Productive Urban Landscapes (Viljoen, 2005; Bohn and Viljoen 2010) and discovered the specific opportunities presented by the peri-urban interface (Sieverts, 2003, Parham, 2019).

The city as a contested terrain: urban food movements and the struggle for food justice

While urban food movements across the globe have typically organised around questions of urban hunger and food insecurity, a more organised response to the corporate food regime has united many of these movements around a food justice perspective, striving for equal access to food in cities (Wekerle, 2004; Alkon and Agyeman, 2011). These movements have typically tied into community garden initiatives or community supported agriculture; they have also challenged the enclosure of resources and reclaimed public land as a collective food growing resource (Lyons et al., 2013, Tornaghi, 2012; Certomà and Tornaghi, 2015; Tornaghi and Certomà, 2019). While the food justice movement is typically rooted in race-, gender- and class-based struggles for equality, in their rights-based orientation they are potentially aligned with the more globally oriented and agrarian-based food sovereignty movement. Many urban movements, however, encounter the limits of a neoliberal context (Clendenning et al., 2015). Urban food planning, in general, remains locked up within reformist, at best progressive, policy frameworks that lack a radical and transformative dimension (Holt Giménez and Shattuck, 2011; McClintock, 2014; Tornaghi and Dehaene, 2020).

The city as a dysfunctional ecosystem: mending the urban metabolism

A large section of the food planning literature reflects a general effort to analyse the environmental performance of the urban ecosystem, reducing the extractive use of resources brought in from elsewhere and internalising the negative externalities caused by urban growth. Urban agriculture in particular has been praised for its potential to deliver a broad range of ecosystem services: contributing to the reduction of food waste and the circular use of urban waste streams, the reduction of greenhouse gas emissions, integral urban water management, the use of renewable energy, and improved biodiversity (Viljoen and Wiskerke, 2012; Aerts et al., 2016). Many urban food policies are implemented in the context of policy arenas specifically geared at the realisation of urban climate goals. The urban arena and the regional food system have been embraced as plausible scales to analyse and structure the complex relationships within the global food-water-energy nexus (Allouche et al., 2019) and to mend the metabolic rift between town and country (Schneider and McMichael, 2010; Dehaene et al., 2016).

The city as a growing number of mouths to be fed

Many advocates of urban food planning make reference to the UN habitat statistics stating that since 2008 more than half the world's population lives in cities (Morgan and Sonnino, 2010; Wiskerke, 2015; Ilieva, 2016). The growing challenge of feeding the world is increasingly an urban challenge. Carolyne Steel's bestselling book 'Hungry City' convincingly showed how urbanisation historically also comes with a growing dependency on processes that largely fall outside of the control of cities (Steel, 2008). At the same time, cities, in particular those of the Global South, have been documented as the habitat of local food initiatives, and forms of self-organisation, contributing to a geography of small- and medium-size cities that still display a significant degree of self-reliance (Mougeot, 2005). Urban agriculture, and even more specifically urban agroecology, has been taken up by the Food and Agriculture Organization of the United Nations (FAO) as an important alternative source of food and contribution to the creation of sustainable livelihoods (Dubbeling et al., 2010; IPES-Food 2018).

Against the background of this landscape, in the next section we aim to contribute towards pushing the boundaries of urban food planning, to discuss how we advocate for food to be fully embraced as an urban question, and to prepare the ground for what we call an agroecological urbanism.

1.2 Food as an urban question: pushing the boundaries of urban food planning

As the field presents itself in more consolidated form we are also at a point in which we see its limits. We see limits in the extent to which the field has questioned current models of urbanisation, the selective uptake of 'urban questions' (i.e., what has been taken up as a matter of urban policy and urban collective arrangements), and in the planning models that have been adopted to address the urban food question.

Urbanisation unbounded: the geography of the urban food question

Food planning by and large still treats the city as a container in which food needs to be retrofitted. This is particularly true for the sometimes uncritical embrace of the full spectrum of urban agriculture initiatives. Urban agriculture has been mostly projected on existing open spaces, fringe spaces, often along infrastructure corridors, on roofs, etc., without fundamentally questioning the land use dynamics that, more often than not, contribute to the further destruction of valuable soils, the contamination of aquifers, the fragmentation of nutrient cycles, and the disruption of critical ecosystems. Most food plans accept the division between town and country that places the urban on the consumption side and introduce urban agriculture as a novel exception. Different forms of Urban Agriculture are typically mapped along the urban transect (Duany, 2012; de Graaf, 2012; Lohrberg et al., 2016) and work under the assumption that the geometry of urban-rural land-use dynamics can be adequately captured in terms of centre-periphery relationships.

A more complex understanding of the urban landscape can be found in the framework of the urban food region. This perspective also runs the risk of uncritically embracing the urbanistic consensus that sustainable urbanisation is compact and can be contained within the regional geography of a physiographic basin. While these models may have their role to play, they stand in the way of a food urbanism that embraces the multiscale geometries of the planetary urban in full (Brenner, 2013). Such exercises may take inspiration from the historical work of early socialist and anarchist thinkers such as Vandervelde (1903), Kautsky (1988) and Kropotkin (1998) that tried to translate the politics of land and labour of industrial urbanisation within a mixed geography of "fields, factories and workshops" (Kropotkin 1998). Equally inspiring are the echoes of these historical reflections in the work of Murray Bookchin (1976) and Colin Ward (1999), or the speculations about Desakota landscapes (McGee, 1991) and Agropolitan Development (Friedmann and Douglass, 1978) in the Global South. All these are speculative exercises that share attention with the agrarian side of the question of urbanisation and resist the extractive, centralistic, cumulative *status quo* of capitalist urbanisation in favour of distributed models in which food production is part and parcel of the urban landscape. In our quest for a radical rethinking of food planning, our first key message is a call for overcoming the artificial and capitalism-driven geographical and conceptual separation of what is thought of as 'agricultural lands' from what is conceived as 'urbanisation'.

The selective uptake of urban questions: the food question as an afterthought

Food planning is in part a response to the selective and limited ways in which food has been treated as an urban question over the past 100 years. Urban questions have historically been concerned with social reproduction under urbanisation (Castells, 1972) and the exacerbated relationships of interdependence that urban life comes with. While answers to the urban social reproduction crisis have not always been necessarily urban, the interplay between social movements and business interests has posed considerable pressures on the urban political agenda to provide an answer.

Affordable housing and cheap food were equally essential to the reproduction of industrial waged labour; however, their different historical treatment, and the different ways in which they have been commodified, is striking. Transport and commuting have been key to keeping house prices low and to keep the proletariat out of the city, but public housing provision would always remain central to the urban agenda (Polasky, 2010). The urban food question could have been sorted through protection of urban and peri-urban agricultural land, an investment in logistics, municipal slaughterhouses or the appropriate provision of wholesale markets, while in fact they have been used only to facilitate the import of food from elsewhere (Cronon, 1992; Steel, 2008) and to enable the massive conversion of agricultural land to urban land use. While housing, transport and sanitation have made it into the main chapters of the urban planning textbooks, food was for the footnotes, only to be rediscovered lately as a novelty in the field.

While cities have begun to subscribe to (slightly) more ambitious goals, such as those formulated within the Milan Food Policy pact or by the FAO, the translation of these goals in actual policies remains attached to those policy areas that have historically landed on the urban side. Urban food policies tend to focus on consumption and consumer behaviour, insufficiently questioning the extreme state of food commodification within cities. Strategies to decommodify food remain attached to welfare measures typically associated with food poverty (i.e., food vouchers), compensating for the failures of a commodified urban foodscape rather than aiming for its fundamental transformation. In order to put food on the urban agenda, food policies have been tactically linked to urban climate governance, public health policies, food poverty measures, or waste management. These tactical alignments do not necessarily break open the structural barriers that exist between divided policy silos, leaving the potential of a food perspective to contribute to policy integration largely untapped.

Our second key message for a renewed planning approach to food is the call to fully embrace the production of food (not only its consumption) as an 'urban question', a question that needs to be responded to locally. In order for food to surge to the same level as housing or transport in the planning agenda, it is necessary that land and soils enter the political agenda, and reshape the politics of resource management. This means that land for food production and the preservation of healthy soils do not come secondary to (and hence sacrificed for) the expansion of road infrastructure, housing development or new commercial areas. While it is obvious that no urban context alone is expected to meet its food needs, the surging of food to a fully articulated urban question will require new fields of work to be defined and articulated in ways that substantially redefine the hardwiring and the software of our urban environments. This is in terms of land use (i.e., proactive policies for enhanced land protection in the urban and peri-urban, programmes for the use of existing public land, plans for reconversion of land to agricultural use), infrastructure (i.e., build or rebuild the infrastructure for food production, including use and redirection of organic waste streams, legal protection of soils, programmes for soil regeneration, waterways sanitation and restoration for agricultural use, creation of municipal free-seeds banks, etc.), and logistics (institution of municipal storage spaces).

The hegemony of established planning ideas: a food blind planning guild

Food might be innovative for planning, but is planning sufficiently innovative to address the urban food question? Some humility is in place here. As Ilieva puts it, "planning might be part of the problem":

For many years, urban plans have labelled periurban lands around cities as 'awaiting development' and hatched them as blank space, disregarding the great diversity of rural infrastructures and landscapes that distinguish one periurban area from the other. Urbanization

proceeds regardless of these diversities and thus has had a detrimental impact on many peri urban farms and rural heritage sites, particularly in European urban regions. (Ilieva, 2016, 80)

The great challenge is to see the historical blindness of planning to food. Changing that does not only require a new song, but touches the epistemological foundations of planning. This includes the conceptual hierarchy that is embedded in the field, that thinks from the centre and disqualifies the rest as periphery (Angelo and Wachsmuth, 2015), gives disproportionate weight to questions of real estate, housing, transport, etc., the subjects that drive the urban growth machine, that operates through legal frameworks and technical instruments that reproduce this conceptual hierarchy.

Our third key message for the renewal of food planning is that this is not possible without a deep rethinking of the field of planning itself. The very notion of planning, as deeply anthropocentric, rooted in instrumental rationality, the domination of nature, and historically complicit with the power geometries of a colonial world order, may even be the wrong label to imagine a food inclusive, resource conserving and regenerative urban world. The wager to fully think food as an urban question, however, may be a concrete and tangible starting point to imagine a future for 'the field formerly called planning', including the delivery of its emancipatory aspirations.

2. Urbanism, food and social reproduction

Planning's historical blindness to food can be better understood (and challenged) in all its consequences if we look at the history of planning and urbanisation from the perspective of social reproduction. Feminist social reproduction scholars have provided fundamental insights into how the social and material reproduction of societies, including for example giving birth, care work, and food provisioning; these have been historically ensured over time¹. The rise of urban planning in the last century was met with an ongoing critique of the links between capitalist industrialisation and processes of urbanisation. Scholars in the 1960s and 1970s exposed how urbanisms were ideologically-driven and value-laden practices organising urban space and life, functional to the dominant economic, political and social order. Colonial, capitalist (and patriarchal) values shaped the articulation of urban space needed to ensure the maintenance and thriving of capitalist societies, processes of accumulation, and resource extraction. Critical urban scholars, such as Henri Lefebvre, Manuel Castells, and David Harvey, have pointed out, for example, how the expansion of the built environment and the destruction of fertile lands was essentially linked to the circuits of capital and the search of its ongoing expansion (real estate speculation, capital spatial fix). They also describe how state-led provision of collective services, such as education and social housing (elements of social reproduction) were functional to enabling a work force (once based in the countryside as at least partially self-sufficient farmers) to be concentrated around factories, and how urban ways of life had a growing environmental and social effect on a planetary scale. These effects included the ongoing depletion or pollution of natural resources, the development of tourist resorts on virgin lands, and the subjugation of agriculture to commodity markets. All these were well beyond the sphere of the urban.

Feminist scholars have provided fundamental critiques and much needed integrations to these theories, shaping a 'social reproduction' perspective. They observed that a fundamental element in the ongoing renewal of capital relationships was not only the appropriation of means of production on behalf of the capitalist (as most Marxist literature has unpacked), but also the unpaid and unrecognised labour necessary for the reproduction of the workers, which were often the responsibility of women (Dalla Costa and James, 1975; Federici, 2004, 2012, 2019). These included,

¹ Given the space constraints, we focus this discussion around the last 150 years, although Silvia Federici (2004) and Harriet Friedmann (1987) have provided detailed and enlightening overviews of the social and international relationships that impacted on both food regimes and women's lives, covering a history dating back to the 15th century or earlier.

alongside the obvious biological reproduction of life (giving birth), all the domestic and care work needed for the day-to-day reproduction of able workers: providing for the satisfaction of sexual needs, the preparation of food, the washing and sewing of clothes, care for the children and the elderly, the education and socialisation to cultural norms and social rules (Fraser, 2016, p.23; Jacka, 2017). These activities were not only necessary for the reproduction of society and life in general, but were often a direct outcome of oppressive social arrangements emanating from patriarchal values.

Some of the feminist scholars active in this field had begun to critique how the urban design and architecture informing new urban and suburban development were often implicated in the reproduction of isolating living conditions, which rendered impossible the socialisation of these tasks (Hayden, 1982). Socialist and anarchist material feminist groups, especially in the period between the end of the 19th and the beginning of the 20th centuries, engaged in the conceptualisation and development of concrete alternatives for the management of these tasks in common, including experiments in urban planning and development. At a time where the male-dominated professions tried to render housework more efficient through the technological innovations of modern utility systems and imagined apartments equipped with housekeeping machines and kitchens built into each minimum dwelling, the imaginaries of these groups were centred around public/collective kitchens, kitchenless houses, co-operative housekeeping, communal living, and community-led urban agriculture (see, for example, the work of Melusina Fay Peirce, Charlotte Perkins Gilman, Mary Livermore, Ethel Puffer Howes, Charles Fourier, Ebenezer Howard, among others).

However, while pointing out that social reproduction has been undervalued and under-investigated, they also pointed out how it remained secondary and subservient to capitalist production. It is important for our argument to focus on the conditions of the provision of food.

First, it is important to remember that capitalism had deep roots in agriculture in the 15th century, with the expropriation of land and common lands to farmers, what is called 'primitive accumulation', and the rise of international trades of goods, and later slaves. The creation of masses of dispossessed, destitute people was the pre-condition for the rise of industrialisation and rapid urbanisation.

Under conditions of commodification of labour, workers become

“dependent on market for the items they once produced at home (or obtained through the informal economy). (...) without a wage they cannot obtain crucial subsistence goods. It is because of this cycle of dependence that the market actually comes to dominate social reproduction in general.” (Ferguson, 1998:4, in Bakker and Gill, p.21).

Alongside the commodification of labour, family-based food production/gardening/animal rearing, that had been common practice and survived in many urban contexts, has progressively been residualised, and food provision treated as a commodity.

The agro-industrialisation of food, supported by the green revolution, as well as various forms of dumping of “cheap food from nowhere” (Bové, et al. 2002), have naturalised the abstraction of agriculture from its ecological and cultural foundations (McMichael, 2003, p.173). Over time we have become used to think of the urban being on the side of consumption and rural on the side of production. Alongside the furthering of primitive accumulation, the enclosure of common lands, the urbanisation of residualised fields and the set of hygiene standards, many food provisioning practices have been rendered impossible and its scope and diversity severely reduced. People have grown disconnected from the ecological basis of food production, its seasonality, the importance of returning organic waste (i.e., kitchen waste) to the land to feed the soil. They have lost not only

fundamental knowledge to understand our mutual interdependence with other life organisms (what Schneider and McMichael have discussed as “epistemic rift”) and the ability to provide for their survival, but they have also lost the very possibility of reproducing such knowledge: they have lost the possibility of practicing it (Schneider and Michael, 2010; Tornaghi, 2017).

In the consolidated urban environments of the global north, public and private spaces are not generally designed to accommodate food self-provisioning communities, nor do they offer the infrastructure needed to serve urban and peri-urban smallholders. Land values and land tenure regimes devalue food production and cater for speculative and profit-oriented approaches to land ‘development’. Organic waste management is driven by short-sighted cost-saving approaches, rather than soil-nurturing and nutrient-recovery practices. A social reproduction perspective enables us to see the specific biopolitical character of those forms of urbanisation that have institutionalised and reproduced urban ways of living that assume the endless provisioning of cheap food ‘from nowhere’. This food is produced unsustainably by underpaid farm workers, wasted in disproportionate amounts, and often processed in unhealthy ready-meals because people increasingly do not have the available time or skills to cook.

Social reproduction scholars have indeed pointed out how the progressive absorption of women into the labour market, and the ongoing retreat of the state from social provision of welfare, have coincided with a re-privatisation of social reproduction (Mitchell et al., 2004) by either externalising care work to paid workers, or a re-burdening of women with care work, often in addition to full-time waged work. To heal the knowledge and epistemic rift, we do not only need to promote a reconnection of farmers with urban dwellers, but also need to create time and space for those practices needed to reproduce (embodying) lost knowledge.

Sustainable food planning, in its attempt to transform the food system, therefore, needs to understand and challenge the profound interconnection between capitalist and neoliberal values and practices on the one hand, and the arrangements for social reproduction ingrained in processes of urbanisation on the other. These efforts should not stop at the critical deconstruction of the urbanisms of capital. We see it as a call to imagine alternative urbanisms that decouple urbanism and capital, and seek to imagine forms of urbanisation that value the social reproduction of life in general, and of food in particular, differently (Tornaghi and Dehaene, 2020). This is a tall order given the intimate historical relationship between urbanisation and capitalism that has defined the ways cities have been structured since the rise of industrial capitalism. Our call for an agroecological urbanism (which we will work out further in the next section) in order to transform our food system, takes inspiration from political agroecology, as a movement that offers concrete alternative value systems, social arrangements and ecological practices from where to imagine a post-capitalist world.

3. Agroecology and the re-articulation of the urban food agenda: imagining an agroecological urbanism

“Agroecology -in our view- is not just an agricultural method: it is a ‘package’ of value-based practices which are explicitly addressing social and environmental justice, are culturally sensitive, non-extractive, resource conserving, and rooted in non-hierarchical and inclusive pedagogical and educational models that shape the way food is produced and socialised across communities and generations. Agroecosystems, while specific to each geographical context, share a number of ecological and social features including “socio-cultural institutions regulated by strong values and collective forms of social organisation for resource access, benefits sharing, value systems”. The principles and practice of agroecology, centred around multi-species solidarities, biodiversity and environmental stewardship, have been extensively noted for their ability to conceive of and deliver *alternative ways of producing food*. Agroecology is also being strongly mobilised as a *political tool*. Its strong links with the international food sovereignty movement, and its inclination to action-oriented, transdisciplinary and participatory processes has led to defining it simultaneously as a science, a movement and a practice. Political agroecology and urban political agroecology are taking shape at the crossroads between scholar activism and urban movements, although its full political potential is yet to be metabolised” (Deh-Tor 2017).

Political agroecology has been the framework within which we have embraced the lessons learnt from feminist social reproduction scholars and began to push the reimagining of the urban food planning agenda. Below we explore how agroecology may push the geographical boundaries of the discipline, the political agenda, and the disciplinary scope of sustainable food planning.

Agroecology and the biopolitics of the productive city

Thinking the urban through an agroecological lens is more than a call to rebuilt urban-rural linkages within the existing geography of capitalist urbanisation. Rather it challenges the mechanisms that reaffirm their separation, with production on one side and consumption on the other, with agrarian versus urban questions, but also with nature on the outside and technology, culture and artifice on the inside. An agroecological urbanism is a political ecological project that seeks to rethink the 'nature of cities' (Heynen et al., 2005) and tries to imagine urban ways of life that relate concretely to, make space for, and are centred on the ecological basis of food production.

As reproductive work is enmeshed with production and cannot really be thought separately, the reshaping of an urban food agenda cannot just be done by plugging agroecology and food into the interstices of the system. Remembering that an urbanism is made up of the collective arrangements that a society makes to organise the collective support and care in the context of exacerbated conditions of interdependence, the agroecological urbanism we imagine joins the political path of agroecology, and builds on the quest for nature-inclusive forms of agriculture in order to imagine an urbanism that thinks social interdependence and more-than-human interspecies solidarities together (Haraway, 2016; Puig de la Bellacasa, 2017).

Rethinking the biopolitics of the city in an agroecological perspective means to shape an urbanism that re-operationalise the links between urban green spaces and farming fields in the periurban fringe, between urban dwellers and food transformers, and between organic waste collectors and territorial food hubs. Within this reflection we see a specific role for the peri-urban context where the processes that work towards the separation of the agrarian and urban question can be seen in action. It is a context in which 'urban', 'rural', 'no longer rural' and 'already urban' communities are co-present and where we see possibilities to imagine the construction of an agroecological urban subject. It is a reality where the skills, the farmers operating infrastructure, the differentiated landscapes that historically enabled regenerative farming practices are often still in place in residualised or fragmented form. In the midst of such landscapes in transition an alternative order could be established, starting from the reappropriation of such residualised landscapes, taking back the nutrient scapes and valuable soils, mobilising remaining skills, activating remaining proximity relations between rural and urban fragments.

An equally important role in the re-organisations of these relations can be played by the neighbourhood 'political community kitchen', a place that can act at the interlink between communities (peri-urban food producers, food processors, community caterers, urban gardening and reskilling groups), food producing activities and territorialities, recasting the neighbourhood scale as central in the building of resourceful communities.

Agroecology and the urban politics of ecological resources

The agenda for an agroecological urbanism is one that has to be literally built with constituencies that belong to worlds that have been separated by the urbanisation of capital. While the agenda of the political agroecology movement has been built in urban exile, with the urban often seen as a direct threat and driver of the logics of dispossession that movements such as the Via Campesina have been fighting, we see agroecology as a comprehensive agenda that provides the key principles

upon which a socially inclusive, ecologically sustainable and resourceful urbanism could be built, that is a way of organising the urban that would putting the care for its social reproduction central.

Agroecology as a science a movement and a practice (Wezel et al., 2009) is a rich and contextually diverse repertoire of very concrete ideas that can be mobilised by communities 'in place' and around which new collective arrangements can be built. The agenda of the agroecology movement has been typically defined in terms of the contrasting logics of agroecosystems and conventional farming. Gliessman (2007, pp.8-16) builds on this to identify 7 areas in which agroecology could play a curative and transformative role: soil degradation, overuse of water and damage to hydrological systems, pollution of the environment, dependence on external inputs, loss of genetic diversity, loss of local control over agricultural production, global inequality.

If we understand the close connection between the process of urbanisation and the expansion of large scale, extractive forms of conventional farming, we immediately feel how this list could equally lead to the construction of a transformative urban agenda. Such an agenda would:

- i) link land use to soil care and interrupt the logics of substitution that make it possible to bring food to the city rather than produce it locally.
- ii) give a central role for agroecological farmers as stewards of the watersheds that urban systems are typically part of.
- iii) team up with agroecology not only to reduce the polluting effects of industrial agriculture but also to engage in the rebuilding of topsoils on urban damaged lands, including the use of organic material from urban waste streams.
- iv) join forces with nature conservationists and builds rich gradients and connections between the intrinsic biodiversity of conservation (or rewilding projects) and the functional biological diversity of agroecological farming.
- v) adopt the principles of resource sovereignty as a means to reinforce both farmers autonomy as well as a tool to rebuild some local control over food security.
- vi) challenge ethnocentric and exclusive constructions of territorial sovereignty in favour of place based solidarities that embrace the full diversity of the urban demography.

Agroecology and the politics of (planning) knowledge

Political agroecology has convincingly made the link between a systemic and systematic analysis of agroecosystems and food systems. That relationship is extremely complex: the transformation of the system requires not only a radical transformation of the way processes of urbanisations are organised, but also a partial renewal of the type of planning that is needed. To successfully nurture and build an agroecological urbanism, new concerns need to be put at the centre of the planning profession and new skills need to be taught in planning schools. While sustainable food planning has been an innovative force in planning education, the call for an agroecological urbanism is a call to move out of planning schools into the world of agroecology and back, exposing a new generation of planning students and professionals to matters of concern that were not included in the traditional imaginaries of an urban-based community of practice.

We see great potential in forms of advocacy planning that literally translate the principles of agroecological food production, in all their local and cultural diversity, into an agenda for the transformation of the urban landscape from a food disabling into a food enabling one. Such a food planning project is not just a technical endeavour but requires political pedagogies that make new

positions available for the food-alienated citizens, subjects of the urbanisms of capital. We imagine concrete advocacy working with food growing communities, identifying the building blocks of an 'agroecological mode of life', finding the forms and collective articulations for a society that places food practices central in caring for its social reproduction.

While such a call may sound overly abstract, the beauty of focussing on agroecological imaginaries and principles is that such work could find direct and concrete roots in concrete communities and places, in the existing efforts of the very people that today try to create the circumstances to care for the soil, to care for their plants, to care for their communities, and face very specific, contextual, daily challenges to do so. It is from these cumulated efforts of political agroecology communities that the force of an urban agroecological transformation could be derived. An agroecological urbanism, then, is more than an agenda: it is also a quest for the platforms and spaces through which such an agenda can be built and supported. We take inspiration from the efforts to root the renewal of urban planning within innovative and radical forms of urban governance, such as radical municipalist projects or communities of food commoners. Where the national planning and supra-national planning arenas continue to cater to the vested interests of the agro-industrial complex, we see potential and precedents to bring a radical municipalist agenda (Russell, 2019) and the struggles of political agroecology together. The first initiatives to build networks of agroecological cities point towards such an agenda (López et al., 2017).

4. Resourcing an agroecological urbanism within a heterodox community of practice

"What if solidarity, mutual learning, interspecies (more than human) exchanges, environmental stewardship, food sovereignty and people's resourcefulness were the principles of a new paradigm for urbanisation? How would urban design, property regimes, food provision, collective services, and the whole ensemble of planning and socio-technical arrangements change, if they were informed by urban agroecology? How can we begin to radically transform the food disabling urban landscapes that have systematically displaced food production, recovering both historical food growing practices and imagining new urban arrangements?" (*Deh-Tor, 2017*)

The incipit here above illustrates the kind of questions that, in 2017, led us to call for an international forum for urban agroecology. We were looking for allies within the food planning community to embrace the principles of agroecology, and the tools of political agroecology to join forces with social movements and food activists to build a constructive vision for an agroecological urbanism. The forum we imagined does not exist in consolidated form but the project moved ahead on different fronts. The conversation with the AESOP sustainable food conference continued with sustained attention for the intersection of agroecology and sustainable food planning in the 2019 conference in Madrid, hosted by Marian Simon Rojo. We (the authors of this chapter) received funding from JPI Urban Europe and the Belmont Forum to explore pathways for resourcing marginalised peri-urban agroecological farmers and for the conceptualisation of concrete building blocks for an agroecological urbanism, with partners in Riga, Brussels, Rosario and London (Tornaghi and Dehaene, 2020). This edited volume is also an attempt to bring together pieces of the urban agroecology puzzle.

The voices in this book are quite diverse. A few chapters squarely belong to the community of food planners and are authored by people who identify themselves in those terms. For many the question of planning, let alone urbanism, is by no means the starting point of their engagement. One of the great merits of the food planning community, however, is that it has contributed to the encounter of heterodox voices and thereby to an expanded understanding of planning. In a moment of growing production in the field of sustainable food planning, what is becoming increasingly clear is that there is wide divergence regarding the kind of planning that is being promoted, and the specific role assigned to cities and the urban policy arena. We believe that it is important not to lock up the urban food question within the confines of disciplinary boundaries, but rather to link up to the diverse movements leading food systems innovation.

The selection of contributions in this book reflects this diversity, without any ambition of being comprehensive. Together they form a grid of entries into a field. Most importantly, the various contributions show different trajectories through which an expanded and re-politicised urban food agenda can be built and identifies some of the communities that could be mobilised or are mobilised already. The authors in this book share the belief that to bring about an agroecological urbanism, a project so fundamentally at odds with capitalist urbanisation and the dominant food systems in place, the road ahead is a political one that requires clear positions regarding the geography and territoriality of the food planning agenda, the value positions that define what is appreciated and depreciated, reproduced or discarded, the subjectivities and terms of engagement through which such a transformative agenda could be moved forward.

The book includes several chapters that discuss the methods of mobilisation and engagement that could bring about situations in which humans and non-humans could enter into more virtuous relationships and take up roles for which they now lack the resources, the skills, or the imagination. The book includes accounts of concrete participative forms of action research that has sought to include agroecological farmers within debates on food systems transformation and sustainable food planning (in particular Chapters 2, 7 and 8). Several contributions reflect on the counter-hegemonic strategies necessary to bring about an agroecological urbanism. These could come in the form of the politics of the commons (Chapter 3), could take inspiration from the solidarity economies built by the Chiapas in Mexico (Chapter 9), or may require global solidarities between precarious communities in the north and peasant movements in the global south (Chapters 8 and 10). Several chapters start from the need to challenge and interrupt the mechanisms that reproduce the problems of our current food system, its inequalities and logics of dispossession (Chapter 10), the pervasive contamination of soils in general and urban soils in particular (Chapter 6), the loss of skills and the extensive alienation of urban subjects (Chapters 2 and 7), the reproduction of colonial and extractive relationships with capitalistic urban societies (Chapter 3). Some chapters build on specific practices that hold the promise of engendering new agroecological relationships within our urban landscape (Chapters 4 and 5). Chapter 5 explores the way in which the introduction of food producing perennials and principles of agroforestry could transform the way we look at open space resources and the landscape ecology of the urbanised landscape. Chapter 4 discusses the reappropriation of fragmented lands on the peri-urban fringe by agroecological smallholders.

Overall we see the authors of these chapters as travel companions, and we hope the book will inspire other practitioners, scholars and scholar activists to join in reimagining and building an agroecological urbanism.

References

- Aerts, R., Dewaelheyns, V. and Achten, W. M. J (2016) *Potential ecosystem services of urban agriculture: a review*. PeerJ Preprints 4:e2286v1.
- Alkon, A. H. and Agyeman, J. (eds) (2011) *Cultivating Food Justice: Race, Class, and Sustainability*. Cambridge, MA: MIT Press.
- Allouche, J., Middleton, C. and Gyawali, D. (2019) *The Water–Food–Energy Nexus: Power, Politics, and Justice (Pathways to Sustainability)*. New York: Routledge.
- Angelo, H. and Wachsmuth, D. (2015) 'Urbanizing urban political ecology: A critique of methodological cityism'. *International Journal of Urban and Regional Research*, vol 39, no 1, pp16-27.
- Baker, L. and de Zeeuw, H. (2015) 'Urban food systems'. In: H. de Zeeuw & P. Drechsel (eds), *Cities and Agriculture. Developing resilient urban food systems*. London and New York: Routledge, pp. 26-55.

- Bakker, I. and Gill, S. (eds) (2003) *Power, production and social reproduction*, Palgrave Macmillan
- Bezanson, K. and Luxton, M. (2006) *Social Reproduction. Feminist political economy challenges neo-liberalism*, McGill-Queen's Press.
- Bohn, K. and Viljoen, A. (2010) 'The edible city: Envisioning the Continuous Productive Urban Landscape (CPUL)'. *Field Journal*, vol 4, no 1, pp149-161.
- Bookchin, M. (1976) 'Radical Agriculture', in: R. Merrill (ed.) *Radical Agriculture*. New York: New York UP, pp3-13.
- Bové, J., Dufour, F. and Luneau, G. (2002) *The World is Not For Sale: Farmers Against Junk Food*. London; New York: Verso.
- Brenner, N. (2014) *Implosions/Explosions. Towards a Study of Planetary Urbanization*. Berlin: Jovis.
- Cabannes, Y. and Marocchino, C. (eds) (2018) *Integrating Food into Urban Planning*. London, UCL Press.
- Castells, M. (1972) *La Question Urbaine*, Paris: Maspéro.
- Certomà, C. and Tornaghi, C. (2015) Editorial. Political gardening. Transforming cities and political agency. *Local Environment: The international journal of justice and sustainability*, vol 20, no 10, pp1123-1131.
- Clendenning, J., Dressler, W. H. and Richards, C. (2016) 'Food justice or food sovereignty? Understanding the rise of urban food movements in the USA'. *Agriculture and Human Values*, vol 33, no 1, pp165-177.
- Cohen, N. (2010) 'How great cities are fed revisited: Ten municipal policies to support the New York city foodshed'. *Fordham Environmental Law Review*, vol 22, no 3, pp691-710.
- Cronon, W. (1992) *Nature's Metropolis: Chicago and the Great West*. New York: WW Norton & Company.
- Dalla Costa, M. and James, S. (eds) (1975) *The power of women and the subversion of the community*. Bristol: Falling Wall Press.
- de Graaf, P. A. (2012) 'Room for urban agriculture in Rotterdam: defining the spatial opportunities for urban agriculture within the industrialised city'. In: A. Viljoen, A. and J. S. C. Wiskerke (eds), *Sustainable food planning: Evolving theory and practice*. Wageningen: Wageningen Academic Publishers. pp533-546.
- de Zeeuw, H. and Drechsel, P., (eds) (2015) *Cities and Agriculture. Developing resilient urban food systems*. London and New York: Routledge.
- Deh-Tor, C. M. (2017) 'From agriculture in the city to an Agroecological Urbanism: The transformative pathway of urban (political) agroecology'. *Urban Agriculture Magazine*, vol 33, pp. 8-10.
- Dehaene, M., Tornaghi, C. and Sage, C. (2016) 'Mending the metabolic rift – Placing the 'urban' in Urban agriculture'. In: F. Lohrberg, L. Lička, L. Scazzosi and A. Timpe (eds), *Urban agriculture Europe*, Berlin: Jovis, pp174-177.
- Duany, A. (2012) *Garden Cities: Theory and Practice of Agrarian Urbanism*. London: The Prince's Foundation for the Built Environment.
- Dubbeling, M., de Zeeuw, H. and van Veenhuizen, R. (eds) (2010) *Cities, Poverty and Food: Multi-Stakeholder Policy and Planning in Urban Agriculture*. Bourton on Dunsmore: Ruaf Foundation and Default Book Series.

- FAO (2018) *The role of Cities in the Transformation of Food Systems: Sharing Lessons from Milan Pact Cities*. Available from <http://www.milanurbanfoodpolicypact.org/wp-content/uploads/2018/10/CA0912EN.pdf>.
- FAO (2019) *FAO framework for the Urban Food Agenda. Leveraging sub-national and local government action to ensure sustainable food systems and improved nutrition*. Available from <http://www.fao.org/3/ca3151en/CA3151EN.pdf>.
- Federici, S. (2004) *Caliban and the witch: women, the body and primitive accumulation*. Brooklyn: Autonomedia.
- Federici, S. (2012) *Revolution at point zero: housework, reproduction and feminist struggle*. Oakland, CA: PM Press.
- Federici, S. (2018) *Re-enchanting the world. Feminism and the Politics of the commons*, PM Press.
- Ferguson, S. (1998) Building on the Strengths of the Socialist Feminist Tradition. *New Politics*, vol 7, no 2, pp89-100.
- Forster, T. and Getz Escudero, A.. (2014) *City regions as landscapes for people, food and nature*. Washington, DC: EcoAgriculture Patners.
- Fraser, N. (2016) 'Contradictions of capital and care'. *New Left Review*, vol 100, no 99, p117.
- Friedmann, J. and Douglass, M. (1978) 'Agropolitan Development: Towards a New Strategy for Regional Planning in Asia'. In: F-C. Lo and K. Salih, (eds), *Growth Pole Strategy and Regional Development Policy*, Oxford: Pergamon, pp163-192.
- Friedmann, H. (1987) International regimes of food and agriculture since 1870. In: T. Shanin (ed.), *Peasants and peasant societies*. Oxford: Basil Blackwell. pp258-276.
- Gliessman, S. R. (2007) *Agroecology: The Ecology of Sustainable Food Systems*, Second Edition. Boca Raton, FL: CRC Press.
- Gottero, E. (2019) *Agroubanism: Tools for Governance and Planning of Agrarian Landscape*, Clam: Springer.
- Haraway, D. (2016) *Staying with the Trouble. Making Kin in the Chthulucene*. Durham and London: Duke University Press.
- Harvey, D. (1985) *The Urbanization of Capital*. Baltimore: Johns Hopkins.
- Hayden, D. (1982) *The Grand Domestic Revolution: A history of feminist designs for American homes, neighborhoods, and cities*. Cambridge, MA: MIT Press.
- Heynen, N., Kaika, M. and Swyngedouw, M. (eds) (2005) *In the Nature of Cities. Urban Political Ecology and the Politics of Urban Metabolism*, London: Routledge.
- Holt Giménez, E. and Shattuck, A. (2011) 'Food crises, food regimes and food movements: rumblings of reform or tides of transformation?' *The Journal of Peasant Studies*, vol 38, no 1, pp109-144.
- Ilieva, R. (2016) *Urban Food Planning. Seeds for Transition in the Global North*, London and New York: Routledge.
- IPES-Food (2018) *Breaking away from industrial food and farming systems: Seven case studies of agroecological transition*. Available online: http://www.ipes-food.org/_img/upload/files/CS2_web.pdf.
- Jacka, T. (2017) 'Translocal family reproduction and agrarian change in China: A new analytical framework'. *Journal of Peasant Studies*, vol 45, no 7, pp1341-1359.

- Kaika, M. and Swyngedouw, E. (2011) 'The Urbanization of Nature: Great Promises, Impasse, and New Beginnings'. In G. Bridge and S. Watson (eds.) *The New Blackwell Companion to the City*. Malden, MA, Wiley-Blackwell: pp96-107.
- Kautsky, K. (1988) *The Agrarian Question, Two volumes. Translated by Pete Burgess*. London: Zwan Publications.
- Kenis, A. and Lievens, M. (2014) 'Searching for 'the political' in environmental politics', *Environmental Politics*, vol 23, no 4, pp531-548.
- Kneafsey, M. (2010) 'The region in food—important or irrelevant?', *Cambridge Journal of Regions, Economy and Society*, vol 3, no 2, pp177-190.
- Kropotkin, P. (1998) *Fields, Factories and Workshops Tomorrow* (edited by Colin Ward), London: Freedom Press.
- Lyons, K., Richards, C., Lotus Desfours, L. and Amati, M. (2013) 'Food in the city: urban food movements and the (re)- imagining of urban spaces', *Australian Planner*, vol 50, no 2, pp157-163.
- López, D., Alonso, N., Herrera, P. M., Mérida, J, Pérez, J. M. (2017) 'Cities for Agroecology' Networks in Europe and Spain, *Urban Agriculture magazine*, vol 33, pp55-57.
- Lohrberg, F., Lička, L., Scazzosi, L. and Timpe, A. (eds) (2016) *Urban agriculture Europe*, Berlin: Jovis.
- Manganelli, A. and Moulaert, F. (2019) 'Scaling out access to land for urban agriculture. Governance hybridities in the Brussels-Capital Region'. *Land Use Policy*, vol 82, pp.391-400.
- McClintock, N. (2014) 'Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions'. *Local Environment: The International Journal of Justice and Sustainability*, vol 19, no 2, pp147-171.
- McGee, T. G. (1991) 'The emergence of desakota regions in Asia: expanding a hypothesis'. In: N. Ginsburg, B. Koppel and T. G. McGee, (eds). *The extended metropolis: Settlement transition in Asia*, Honolulu: University of Hawaii Press, pp3-25.
- McMichael, P. (2003) 'Food security and social reproduction: issues and contradictions', in I. Bakker and S. Gill (eds) *Power, production and social reproduction: human in/security in the global political economy*, Palgrave Macmillan, London, pp169-189.
- McMichael, P. (2013) *Food Regimes and Agrarian Questions*, Agrarian Change & Peasant Studies, Halifax: Fernwood.
- Mitchell, K., Marston, S. A. and Katz, C. (2004) *Life's Work: Geographies of social reproduction*, Oxford: Blackwell.
- Moragues-Faus, A. and Sonnino, R. (2019) 'Re-assembling sustainable food cities: An exploration of translocal governance and its multiple agencies'. *Urban Studies*, vol 56, no 4, pp778-794.
- Morgan, K. (2009) 'Feeding the city: The challenge of urban food planning'. *International Planning Studies*, vol 14, no 4, pp429-436.
- Morgan, K. and Sonnino, R. (2010) 'The urban foodscape: World cities and the new food equation'. *Cambridge Journal of Regions, Economy and Society*, vol 3, no 2, pp.209-224.
- Morgan, K. (2013) 'The rise of urban food planning'. *International Planning Studies* vol 18, no 1, pp1-4.
- Mougeot, L. J. A. (2005) *Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture*, Earthscan, London, UK.

- Parham, S. (2019) 'Foodscape and Food Urbanism in Europe: The Urban-Rural Interface'. In E Gottero (ed.), *Agroubanism: Tools for Governance and Planning of Agrarian Landscape*, Cham: Springer, pp109-129. https://doi.org/10.1007/978-3-319-95576-6_8.
- Polasky, J. L. (2010) *Reforming Urban Labor. Routes to the City, Roots in the Country*. Ithaca and London: Cornell University Press.
- Pothukuchi, K. and Kaufman, J. (2000) The food system: A stranger to the planning field. *Journal of the American Planning Association*, vol 66, no 2, 113-124.
- Puig de la Bellacasa, M. (2017) *Matters of care: Speculative ethics in more than human worlds*. Minneapolis: University of Minnesota Press.
- Russell, B. (2019) 'Beyond the Local Trap: New Municipalism and the Rise of the Fearless Cities'. *Antipode*, vol 51, no 3, pp989-1010.
- Schneider, M. and McMichael, P. (2010) 'Deepening and repairing, the metabolic rift'. *Journal of Peasant Studies*, vol 37, no 3, pp461-84.
- Sieverts, T. (2003) *Cities Without Cities: An interpretation of the Zwischenstadt*. London: Routledge.
- Sonnino, R., Tegoni, C. L. and De Cunto, A. (2019) 'The challenge of systemic food change: Insight from cities', *Cities*, vol 85, pp110-116.
- Sonnino, R. (2009) 'Feeding the city: Towards a new research and planning agenda'. *International Planning Studies*, vol 14, no 4, pp.425-435.
- Sonnino, R. (2017) 'The Cultural Dynamics of Urban Food Governance'. *City, Culture and Society*, vol 16, pp12-17.
- Steel, C. (2008) *Hungry City: How food shapes our lives*. London: Random House.
- Swyngedouw, E. (2010) 'Trouble with nature: 'ecology as the new opium for the masses''. In: P. Healey, and J. Hillier (eds), *The Ashgate Research Companion to Planning Theory: Conceptual Challenges for Spatial Planning*. London: Ashgate, pp299-320.**
- Tornaghi, C. (2012) 'Edible Public Space: experimenting with a socio-environmentally just urbanism', *Territorio*, vol 60, pp39-43.
- Tornaghi, C. and Certomà, C. (eds) (2019) *Urban Gardening as Politics*, London: Routledge.
- Tornaghi, C. and Dehaene, M. (2020) 'The prefigurative power of urban political agroecology: rethinking the urbanisms of agroecological transitions for food system transformation', *Journal of Agroecology and Sustainable Food Systems*, vol 44, no 5, pp594-610.
- Tornaghi, C. and Halder, S. (2021, forthcoming) 'Reconfiguring the intersection between urban food movements and agrarian struggles: building an urban political agroecology praxis'. In: B. Engels, K. Dietz, H. Akram-Lodhi and B. McKay (eds), *The Edward Elgar Handbook of Critical Agrarian Studies*. Cheltenham: Edward Elgar Publishing.
- Tornaghi, C. (2017) 'Urban Agriculture in the food-disabling city: (Re) defining urban food justice, reimagining a politics of empowerment'. *Antipode*, vol 49, no 3, pp781-801.
- Vandervelde, E. (1903) *L'exode rural et le retour aux champs*. Paris: Felix Alcan.
- Viljoen, A. (2005) *Continuous Productive Urban Landscapes: Designing Urban Agriculture for Sustainable Cities*. Oxford: Elsevier.
- Viljoen, A. and Wiskerke, J. S. C. (eds) (2012) *Sustainable food planning: Evolving theory and practice*. Wageningen: Wageningen Academic Publishers.

- Vitiello, D. and Brinkely, C. (2014) 'The Hidden History of Food System Planning', *Journal of Planning History*, vol 13, no 2, pp91-112.
- Ward, C. (1999) A peopled Landscape. In: K. Warpole, ed., *Richer Futures: Fashioning a New Politics*. London: Earthscan. pp. 83-98
- Wascher, D., Zasada, I. and Sali G. (2015) 'Tools for metropolitan food planning - a new view on the food security of cities'. In: M. Deakin, D. Diamantini and N. Borrelli (eds), *The governance of city food systems*, Milan: Fondazione Giangiacomo Feltrinelli, pp68-97.
- Wezel, A., Bellon, S., Doré, T., Francis, C., Vallod, D. and David, C. (2009) 'Agroecology as a science, a movement and a practice. A review'. *Agronomy for Sustainable Development*, vol 29, no 4, pp503-515.
- Wekerle, G. R. (2004) 'Food Justice Movements: Policy, Planning, and Networks'. *Journal of Planning Education and Research*, vol 23, no 4, pp378-386.
- Wiskerke, J. S. C. (2015) 'Urban food systems'. In: H. de Zeeuw and P. Drechsel (eds), *Cities and Agriculture. Developing resilient urban food systems*. London and New York: Routledge, pp1-25.
- Wiskerke, J. S. C. (2009) 'On places lost and places regained: Reflections on the alternative food geography and sustainable regional development'. *International Planning Studies*, vol 14, no 4, pp369-387.
- Zasada, I., Schmutz, U., Wascher, D., Kneafsey, M., Corsi, S., Mazzocchi, C., Monaco, F., Boyce, P., Doernberg, A., Sali, G. and Piorr, A. (2019) 'Food beyond the city – Analysing foodsheds and self-sufficiency for different food system scenarios in European metropolitan regions'. *City, Culture and Society*, vol 16, pp25-35.

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CONCLUSIONS. The programmatic dimension of an agroecological urbanism

Michiel Dehaene and Chiara Tornaghi

Introduction

After having taken the reader on a journey along different methodologies, concepts, and political stances, in these conclusions we want to come back to our original aim of foregrounding an agroecological urbanism as a paradigmatic change for thinking sustainable urban food environments and collective solidarities. To this goal, we proceed here with a discussion of what we see as the key dimensions of its programmatic nature.

In Sections 1-4 we begin with reinstating that an agroecological urbanism, i) speaks across the urban rural divide; ii) defines a post-capitalist imaginary for urbanism; iii) depends on politicised pedagogies to move it forward; and iv) is action-oriented and seeks to engage in concrete places.

In Section 5 we then illustrate some of the progress we have made in our current research work, searching for concrete tools to build an agroecological urbanism with different communities of practice. A fuller illustration of this work will be at the centre of our next book.

We then conclude in Section 6 with a reflection on how the COVID-19 pandemic that is unfolding while we are writing these conclusions has strengthened and rendered even more urgent the transformative ambition of an agroecological urbanism.

1. Speaking across the urban-rural divide

While the notion of an agroecological urbanism that we have illustrated (cf. Chapter 1 in this book, as well as Deh-Tor 2017) is intended as an expansive and inclusive concept, in this book it has, first and foremost, been projected as a conversation between two emerging communities: the political agroecology community on the one hand, and the sustainable food planning community on the other. Political agroecology moves from a strong and coherent agenda rooted in agrarian struggles and in the value positions of agroecology; however, it looks at the city and dynamics of urbanisation as a direct threat (Tornaghi and Dehaene, 2020). Sustainable food planning has convincingly demonstrated how the focus on food can act as a catalyst to think about the sustainable transformation of cities, but to date it largely remains an heterogeneous and weakly politicised movement mostly confined within a selective understanding of the (urban) food question centred on food consumption. It has no tradition nor specific language to speak to farmers. Given the long history of separation, not

only between specific geographical settings, but also between different worlds, with different constituencies, different interests, and different subjectivities, such a conversation between agroecology and food planning is, in fact, hard to hold. The proposition of an agroecological urbanism is not just a matter of putting these worlds together. It is an adventure that seeks the transformation of both. With this book we have begun, from an agroecological point of view, a systematic interrogation of the way cities have been organised. Agroecology gives food planning a normative point of reference to define the urban transformations to which it aspires. However, we also ask agroecology to imagine its future on a highly urbanised planet, within an urbanised society. With the latter we do not mean ‘within the city’, but rather within a context of irreducible social differences, within a context of exacerbated interdependence. An agroecological urbanism then seeks to imagine forms of place-based solidarity and collective arrangements within the diverse and interconnected demographics of the planetary urban.

The effort to speak across the urban-rural divide is first and foremost an attempt to question a history of capitalist urbanisation that has normalised the territorial separation of the urban and the agrarian question. While this history has precedents in the emergence of the mercantile city, it really took its systemic and systematic form under dynamics of industrialisation. This led to an urbanism that installed the needed food processing and transport logistics that would structure the rural-urban interface in terms of the exchange of food in commodified forms (Cronon, 1992). It also enabled the logics that made it possible, for the time being, to squander fertile soils for urban expansion.

Against this historical background, more is needed than the reconnection of urban consumers and rural producers. More also than the promotion of urban agriculture that has the merit of reintroducing forms of food production within urban contexts from which food production has been systematically removed. Urban agriculture insufficiently questioned the intimate relationship between urbanisation and the excessive commodification of food in the urban context. In the worst case, the promotion of soilless forms of food production under the urban agriculture label, while presented as a way of saving land, in fact provides the perfect excuse for the destruction of resources (soil to begin with) that are fundamental to agroecological food production.

The ethical principles of agroecology, rooted in environmental justice, interspecies solidarity, principles of environmental care and stewardship, provide all the cues to reconnect urban lives to models of food production that regenerate the ecological basis on which these urban lives depend. These principles, however, have not historically been directed at the construction of subjectivities and social movements that embrace the urban. Taking forward an agroecological urbanism will require solidarities and, ultimately, the construction of new collective subjectivities between urban and agrarian movements (Tornaghi and Halder, forthcoming).

2. Defining a post-capitalist imaginary

Perhaps even harder than imagining a world that is not sorted along urban and rural lines, is to envision urbanisms that are not the formal translations of the political economy of capitalist urbanisation. To a large extent, not only has the critical interpretation of the history of urbanisation been designed to debunk the recent history of urbanisation as the expression of capital accumulation and as the spatial fix of its internal contradictions (Harvey, 1985), the

long history of urbanisation in the West runs historically parallel with the history of capital. It is, however, to that same tradition that we owe the call for an alternative urbanism: “a genuinely humanising urbanism [...] yet to be brought into being” (Harvey, 1973). The effort to imagine an agroecological urbanism is an attempt to answer that call and to render concrete what a post-capitalist urbanism could look like.

Arguing that urbanism and capitalism are not two sides of the same coin, may seem superfluous and removed from all empirical evidence. And yet, through an agroecological urbanism, we wish to join the ranks of those that try to think of a future beyond capitalism. An agroecological urbanism seeks to break with the extractive and colonial logics upon which the history of urbanisation has been built, and to incorporate the ethics of the regeneration of resources within the urban. The focus on food and food production implies a humble position of planning and needs to go hand-in-hand with the acknowledgement of its historical complicity with a structural neglect of the urban food question, and with the progressive marginalisation of local food provisioning practices that historically maintained a connection between the city and its *terroir*.

The pervasive presence of food in our capitalist daily lives makes it a rich subject to engage in the methodologies of Gibson-Graham, namely to (re)learn to see the diversity that is out there and is not accounted for by the logics of capitalism (Gibson-Graham, 2006). An agroecological urbanism may build on all the food provisioning practices that have been residualised by capitalist urbanisation. Documenting the many practices that still exist, and are still reproduced by local communities or indigenous cultures, not only breaks the totalising spell of capitalism, but it also provides direct evidence that other ways of organising exist and may be outscaled and empowered. Moreover, such attention to diverse economies and alternative sets of values is equally critical to devise solidarity strategies to live with the irreparable damage of the legacy of capital.

Taking stock of the ways in which communities have been forced to live within difficult and resource deprived situations, we may find concrete cues for thinking more systematically about what it entails to live on a damaged planet (Tsing, 2017). We are thinking, for example, of the efforts of cities in the global south to reclaim damaged soils for food production through the rebuilding of topsoils with food and green waste.

3. The Role of Politicised Pedagogies

Politicised pedagogies are essentials to the project of an agroecological urbanism in all its transformative ambitions. As the agroecological movement and scholarship has highlighted, the development of agroecology has been consistent with the strengthening of communities of practices, the building of new subjectivities and the articulation of political movements. The marriage of agroecology and food sovereignty movements has marked an even more consistent pathway of politicisation for agroecology and more direct attempts to address food system transformation. Practice and scholarship on agroecological pedagogies, however, has focussed mostly on farmer to farmer (peasant to peasant) learning and farmer training schools inspired by Freirian pedagogical models; they have also focussed on rural contexts and actors (McCune and Sánchez, 2019). This focus on the rural and the active disengagement with the urban realm has been detrimental to the capacity to see the urban as a frontier of struggle, a source of alliances, and an arena to be reclaimed by the movement (Tornaghi and Dehaene, 2020). The focus also acknowledges that transforming the food system requires politics apt

for transforming processes of urbanisation and urbanised ways of life at the same time.

The way ahead, and the programmatic point for an agroecological urbanism, is therefore to rethink the political pedagogies of the agroecological movement in a way that is fit to address the challenge posed by current processes of urbanisation and the residualisation of agroecological farming in the urban and periurban context. It requires questioning whether existing pedagogies in urban contexts are sufficiently specific to equip the farmers with the knowledge to navigate urban challenges of setting up viable businesses (i.e., to address the specific land access, nutrient sourcing, economic models, intersectional solidarities, and consumer engagement needed to thrive within a specific geography or marginalisation). It requires fostering an ecology of learning and an ethic of care, able to trigger deep value-shifts across different urban communities and to build intersectional solidarities. It also requires turning solidarities into new political collective subjectivities across constituencies in the locality, able to articulate a transformative agenda, and to organise and lobby for its implementation.

4. An Action-Oriented and Territorially Ground Practice

Agroecology as a practice, movement and science (Wezel et al., 2009), is embedded in concrete communities and places, and strongly values indigenous and local knowledge. It comes with an acknowledgement of contextual geographical, social, historical, and cultural difference. An agroecological urbanism appeals to this ethos to transform the field of urbanism, to decolonise a discipline permeated with the dialectics of enlightenment and rational domination, in favour of a distributed and transdisciplinary knowledge ecology. It believes in the role of farmers and food growers as stewards of local resources, as key players in the reproduction of knowledge and skills, and leading agents of a food system change. It looks at the urbanised landscapes as “peopled landscapes” (Ward, 1999), inhabited by bodily subjects who owe their livelihoods to the context of which they are a part.

An agroecological urbanism is a concrete and action-oriented agenda. It is about local action in particular places. Where a concrete agenda for urban agroecology could be shaped as part of a radical commitment to the urban, i.e., a radical commitment to shaping place-based solidarities and to a social contract shaped around the acknowledgement of the interdependence of people living their lives within the same territorial basin. These can be the community-driven relationships of a neighbourhood or urban district, but can also include the wider solidarities and collective infrastructures to be built at the level of the agglomeration. An agroecological urbanism challenges planners to expand their horizon beyond the limits of an urban project that thinks such arrangements mostly around housing, transport and energy infrastructure, and begin to see community kitchens, a shared composting infrastructure, green blue networks, water harvesting infrastructure, etc., as essential parts of the way that an ecology-caring urbanisation takes form.

5. Eight Steps Forward: Advocacy Planning for an Agroecological Urbanism

An agroecological urbanism model is not ready to be implemented; rather it is an agenda for the systematic reskilling and retraining of communities to transform the food-disabling city into a food-enabling one. We imagine that the needed learning in which people will have to

engage could take the form of advocacy planning through which concrete communities of practice begin to define ways to systematically embed agroecological food growing into an urban environment. We imagine, for example, how the emerging community working around questions of soil care (cf. Soil Care Network) would engage in the translation of concrete engagement with the soil into a new narrative for spatial planning. We imagine how existing groups engaged in the use of urban waste in composting could lead to the identification of specific nutrient sources within an urban environment and ways in which they could be collected, processed and applied in the remediation of damaged urban lands. We imagine how community kitchen initiatives would team up and systematically build the needed environments to self-produce local food and share it within the communities that support and host them. We imagine how local farmers already mobilised around the issue of land access would question public land policies and imagine a new generation of land readjustment programmes that valorise the residualised soils of the peri-urban fringe and rebuild relationships of nutrient exchange between farmland, pasture land and the wooded parts of the urbanised landscape.

As part of the *Urbanising in Place* project, we have been working with communities in Brussels, London, Rosario and Riga, identifying concrete opportunities for the development of an agroecological urbanism (Tornaghi and Dehaene, 2020). In an effort to bring the lessons learned to an international forum, the consortium behind this programme started to identify eight building blocks of a transformative agenda to refashion the way we organise cities on an agroecological basis. These blocks identify concrete points of articulation that, today, are missing from the urban landscape, or exist only in marginalised forms. The blocks are intended as descriptors of concrete matters of concern, transformational practices and political landscapes around which local and international conversations between agroecologists and sustainable food planners are being set up. We are working to give an actual account of these conversations and the lessons learnt in a second book. The eight building blocks focus on different and complementary territorial scales, but all seek to define a specific relational setting and fruitful combinations between the capabilities of concrete actors and the urban conditions in which they are operating. We see these blocks as steps ahead in the imagination of a form of advocacy planning to be developed together with the agroecological community, systematising and conceptualising the contours of an agroecological urbanism. We discuss them in turn below.

The **productive housing estate** looks at forms of urban development that incorporate food productive spaces within housing schemes and thereby make a direct connection between the right to grow (Tornaghi, 2017) and the right to shelter. This block makes a direct connection between food and housing, two dimensions central to the ways in which social reproduction is structured in an urban environment.

The **territorial food hub** mobilises the place-based solidarities that may exist at the district or neighbourhood scale, combining food production with educational activities, social entrepreneurship and community work, in light of multiplying people's resourcefulness and the collective care of resources in a food-democracy perspective.

The **agroecological park** makes a dent in the consumption of fertile soils by urban expansion and reserves a territorially demarcated area for agroecological food production at the interlink between urban and periurban fringes. This building block projects dedicated areas for agroecological food production equipped with the collective infrastructure (shared composting facilities, shared marketing infrastructure, technical assistance, common pasture land, ...) on which individual growers could rely.

The building block **farming the fragmented land** looks at practices that valorise residual patches of agricultural land within the complex land mosaic of the periurban fringe. It looks at specific business models, strategies to combine land, specific cultivation choices, etc., that build on the potential use value of fragmented landscapes, and in particular their role in building multifunctional and ecologically interdependent agroecological farming initiatives, which current market and land access conditions have rendered monofunctional.

Through the land-based **community kitchen**, we try to imagine a city in which neighbourhoods would be equipped with a food infrastructure in the same way as they now have elementary schools or a health centres. We imagine land-based neighbourhood kitchens that host community composting schemes and food re-skilling sessions, that would be linked-up with growing spaces in the fringe and provide the social infrastructure for a neighbourhood-driven transformation and rescaling of the urban food system.

Politicised pedagogies, as discussed above, are an essential component of an agroecological urbanism. This building block structures the positioning work, the alliance building, and the personal transformation necessary to install a new relational geography within the hearts and minds of new agroecology-minded urbanites.

The **land and market access incubator** combines the training of a new generation of professional farmers with the provision of testing spaces and the facilitation of land access within a competitive urban land market.

The **healthy soil scape** relates the practices of soil care to a landscape geography in which nutrient streams can be circulated and combined within a balanced ecology of permanent grassland, woodland and arable land. It provides the necessary collective infrastructure and knowledge support to regenerate soil fertility beyond the boundaries of the farm.

These blocks are not intended as an end point or as an attempt to box the project of an agroecological urbanism in a set of formulas. They are intended as a starting point for further experimentation and collective learning. They define a provisional attempt to describe a set of points of 'articulations' at the intersection of agroecology and urbanism. They require political work to turn them into the tools of a transformative process.

6. COVID-19 as a catalyst

The writing of the conclusions of this book took place under COVID-19 lockdown. The challenges of working and caring for ourselves and others during the unfolding of the pandemic and the constraints of lockdown work made us despair as far as the disruption of our writing schedules was concerned. It made us hopeful, however, with respect to the agenda of this book, which only seems to have gained in relevance. Three points in particular make us believe that the pandemic not only makes the current global food crisis tangible, but also creates more room to get a discussion on urban agroecology off the ground.

First, COVID-19 offers us an x-ray of how questions of care and social reproduction are structured in societies. They show what there is and what there is not to fall back on. It presents us with the downside of all the things that have been outsourced within the neo-colonial globalised world order. It places the groups that have traditionally benefited from such asymmetrical, extractive relationships at risk, showing the vulnerability of the global cheap food regime. However, it also creates new opportunities to rebuild diverse economies, to reinvest in residualised arrangements of care, to rebuild skills locally, and to shape novel

collective solidarities around the transformation of food into meals.

Second, COVID-19 gives new sharpness to the debate on reterritorialisation. While the main drive of this discussion in food planning has been centred around climate change goals and the need to reduce food miles and related carbon emissions, COVID-19 literally disrupted the global supply chains. COVID-19 makes living within boundaries concrete. The discussion on local food production is suddenly not just a tool for something else, an instrument to deliver ecosystem services, but a legitimate subject in its own right. Resource sovereignty under COVID-19 is not an abstract concept, or the sole aim of rural movements, but a concrete reality felt by millions of people who never thought about the link between food and resources before. Within the local food systems, the difference between the high tech rooftop greenhouse that went out of business as it was only delivering herbs and microgreens to the local catering industry, and the agroecological farm of the CSAs (Community supported agriculture) that has been honouring principles of farmers' autonomy all along and proved to be extremely resilient in times of crisis became striking.

Lastly, COVID-19 made clear how much the biodiversity crisis is an exponent of the deep connection between agriculture and urbanisation. The pandemic of the past year originated in ecologies of disruption and extraction that bring humans in an invasive manner into wildlife habitats that they render unstable while creating unprecedented and unpredictable exchanges between their respective ecologies (Wallace et al., 2020). These aggressive forms of extraction are not only there to serve the land needs of rapidly expanding processes of urbanisation: they are also connected to resource and migration flows towards these urban habitats. While attention first goes to investing in ways of containing the disastrous effects of ecological disruption, it is time to deeply question the way in which we continue to think urban-nature relationships in utilitarian terms. Urban political agroecology presents an interesting trajectory to begin to reimagine and redefine agroecology-centred ways of life in a highly urbanised world.

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References

- Cronon, W. (1992) *Nature's Metropolis: Chicago and the Great West*. New York: Norton.
- Deh-Tor, C.M. (2017) From Agriculture in the City to an Agroecological Urbanism: The transformative pathway of urban (political) agroecology, *Urban Agriculture Magazine*, special issue on "Urban Agroecology", No. 33, pp.8-10.
- Gibson-Graham, J.K. (2006) *A postcapitalist politics*. Minneapolis: University of Minnesota Press
- Harvey, D. (1973) *Social Justice and the City*, Baltimore: Johns Hopkins

- Harvey, D. (1985) *The Urbanization of Capital*. Baltimore: Johns Hopkins
- McCune, N. and Sánchez, M. (2019) Teaching the territory: agroecological pedagogy and popular movements, *Agriculture and Human Values* vol. 36, no. 3, pp.595-610.
- Tornaghi, C. (2017) Urban Agriculture in the food-disabling city: (Re) defining urban food justice, reimagining a politics of empowerment. *Antipode*, vol 49, no 3, pp781-801
- Tornaghi, C. and Dehaene, M. (2020) The prefigurative power of urban political agroecology: rethinking the urbanisms of agroecological transitions for food system transformation, *Journal of Agroecology and Sustainable Food Systems*, vol. 44, no. 5, pp.594-610.
- Tornaghi, C. and Halder, S. (forthcoming) Reconfiguring the intersection between urban food movements and agrarian struggles: building an urban political agroecology praxis, in Engels, B., Dietz, K., Akram-Lodhi, H. and McKay, B. (eds) (publication expected 2020), *The Edward Elgar Handbook of Critical Agrarian Studies (CAS)*, Edward Elgar Publishing.
- Tsing, A. (2017) *Arts of Living on a Damaged Planet*, Minneapolis and London: University of Minnesota Press.
- Urbanising in Place project: www.urbanisinginplace.org
- Wallace, R., Liebman, A., Chaves, L.F. and Wallace, R. (2020) COVID-19 and Circuits of Capital, Monthly Review, <https://monthlyreview.org/2020/05/01/covid-19-and-circuits-of-capital/>.
- Ward, C. (1999) A peopled landscape. In: Warpole, K. (ed.), *Richer Futures: Fashioning a New Politics*. London: Earthscan. pp.83-98.
- Wezel, A., Bellon, S., Doré, T., Francis, C., Vallod, D. and David, C. (2009) Agroecology as a science, a movement and a practice. A review. *Agronomy for Sustainable Development*, vol. 29, No. 4, pp.503-515.