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New geographical directions for food systems governance research

Christopher Yap
University of London, London, UK

Abstract

Food systems governance has emerged as a distinct focus of geographical research. Researchers and policymakers are increasingly engaging with food systems as complex, multi-scalar and cross-cutting sets of issues. This article examines the potential of critical, interdisciplinary readings of the relationships between *the state*, *space* and *territory* to explore new directions and opportunities for food systems governance research and practice. In doing so, the article proposes a critical research agenda that emphasises the interdependent spatial and relational character of food systems governance.

I Introduction

In the past decade, food systems governance has emerged as a distinct focus of research within and beyond the field of human geography. There are important reasons for this. Food systems are complex, interconnected and multi-scalar, incorporating a diversity of material, social, economic and political processes (Allen, 2010; Duncan et al., 2021; Pimbert, 2008; Webb et al., 2021). Dominant food systems reproduce social and environmental challenges, not least food insecurity and malnutrition, obesity, ecological degradation, exploitation of labour and growing inequality (Biel, 2016; McMichael, 2009a; Rosset, 2008). Governing transitions towards fairer and more sustainable food systems, then, represents a significant and urgent set of conceptual and practical challenges.

'Food systems' approaches emphasise the holistic and interdependent nature of food production, distribution and consumption (Ericksen et al., 2012); signifying how different elements within food systems continuously affect one another leading to more or less desirable outcomes. Food systems, then, represent multi-scalar and cross-cutting set of issues, which bring together a raft of critical policy objectives in relation to health, equity, sustainability, resilience and inclusive economic growth, amongst many others (Leeuwis et al., 2021). These approaches have led to broader understandings of food systems, and food systems governance, to incorporate issues such as education, labour and housing (Cohen and Ilieva, 2021).

A recent report described the UK food system as a combination of *activities*, *actors*, *drivers* and *outcomes* (Hasnain et al., 2020). Such a wide set of

Corresponding author:
Christopher Yap, Centre for Food Policy, University of London, City, Northampton Square, London EC1V 0HB, UK.
Email: christopher.yap@city.ac.uk

categories represents a challenge both to policy-makers and researchers in their efforts to understand, govern and enable transitions towards more inclusive and sustainable food systems.

Given that food systems comprise a multitude of relations, processes, and networks that exist simultaneously within and between nested levels from the local to the global – and which have only multiplied through processes of globalisation in the past 40 years – it seems odd to speak about one food system or another; about a local food system or a regional one; the 'UK food system' or the 'European food system.' (Such issues of 'boundaries and 'scale' have long been a focus of debates in the field of human geography, see, for example, Duncan and Savage, 1989; Marston et al., 2005; Smith, 1992). However, such synthetic framings can be highly generative both in so far as jurisdictional-institutional territories provide useful structures for engagement with public policy and because each new framing of the food system – each new level and territory – brings with it new spatialities of overlapping relations; of overlapping socioecological systems and change-making potentials.

This article mobilises critical geographical readings of *state-space-territory* relations, which shift with jurisdictional-institutional level, to explore new directions and opportunities for food systems governance research and practice. An initial literature search using Scopus and Google Scholar using the search term, 'food systems governance', yielded 1070 results. Building on the systematic review of food systems governance literature produced by Hospes and Brons (2016), the search focused on (*n* = 818) publications between 2016 and 2021. Based on the number of citations received and review of abstracts, 30 highly relevant publications were initially selected to produce a detailed annotated bibliography. Through this exercise, further highly relevant literature was identified related to key concepts within the annotated bibliography, using search terms including 'urban food systems governance', 'food systems policy' and 'local food governance'.

Conceptual mapping was used to identify key themes, arguments and trends across this literature. Through the mapping, the relationships between the state and its territory emerged as a central but frequently implicit consideration across the food systems governance literature. A further search was conducted to identify food systems governance literature that engaged specifically with the terms: 'state' and 'territory' (*n* = 202), as well as more theoretical background literature on the nature of the state-territory relations.

As this article sets out, within the field of human geography, the concepts of *the state* and *territory* are frequently and productively linked through the concept of *space*. Brenner and Elden (2009), for example, explore Lefebvre's insightful but unsystematic treatment of the state-space-territory triad, arguing that 'each term reciprocally implies the other, both analytically and historically'. Lefebvre's (2009) argument, broadly, is that the state is inherently spatialised through its territorial-institutional form and the ways that it rationalises space. This argument has been vitally important for advancing spatialised readings of state power as well as elucidating the role of the state in regulating, enabling, and reproducing global capitalist processes. However, for reasons set out, this article also draws on more recent literature that, in different ways, has decoupled the notion of territory from the nation state (Halvorsen, 2019; Trauger, 2014).

The state-space-territory triad is mobilised in this article as a critical rather than analytical lens to structure the literature review and identify opportunities for further research. Critical readings of these relations are juxtaposed with a literature review of food systems governance research in order to reveal insights, opportunities and limitations; to raise questions; and to point towards new meanings and signifiers with regards to key concepts and premises that are found, unevenly, across the literature. In doing so, the article aims to contribute to more geographically sensitive approaches to food systems governance research.

This is not to suggest that geographers have not engaged with food systems governance research, nor that food systems governance research is somehow *un*-geographical; as discussed below, issues of place, localisation and urban contexts have featured prominently in food systems governance literature (see, for example, Battersby and Watson, 2019; Mount, 2012; Sonnino, 2013; Sonnino et al.,

2016). Rather, this article reflects on the potentials of a state-space-territory lens to progress the research agenda in this field. Specifically, it examines how this triad can help to bridge different areas of scholarship by emphasising the interdependent spatial and relational nature of food systems governance.

It is beyond the scope of this article to give attempt a full account of the rich history of conceptual approaches that this article draws and which enable us to better understand food systems governance challenges, such as food regime theory (Campbell and Dixon, 2009; McMichael, 2009b), food systems assemblages (Marsden et al., 2018; Santo and Moragues-Faus, 2019) and sustainability transitions approaches (Markard et al., 2012). Equally, it is beyond the scope of the article to give a full account of the various discourses that engage with the relations between the state, space and territory; scholarship related to food justice (Alkon and Mares, 2012; Levkoe, 2006) and food sovereignty (Patel, 2009; Wittman et al., 2010), for example, have engaged in different ways with issues at the heart of the state-space-territory triad, particularly in relation to land (Borras et al., 2015; McMichael, 2015). Instead, the article only focuses on specific elements within these literatures that explicitly overlap with literature on food systems governance. Developing a more comprehensive classification of conceptions of food systems governance within and across these significant discourses represents an opportunity for future research.

The following two sections are organised around two areas of food systems governance scholarship identified through the conceptual mapping exercise: the first in relation to governance actors and their interactions, which embarks from literature on the role of the state in processes of governance to reflect on the wider set of food systems governance actors; the second in relation to the spatiality and territoriality of food systems governance. These areas are necessarily broad; the aim of the article is not to criticise specific pieces of scholarship or to argue that one position or approach is necessarily better than another. Rather the aim is to identify general trends across the literature, which necessarily manifest in different ways and to different degrees through diverse research produced across multiple geographies. Drawing on the second and third sections, the fourth section sets out three analytic areas for further food systems governance research.

II The state and networked relations of food systems governance

This article uses the term governance to refer to decision-making with regards to food systems *outcomes* – for example, decisions that impact food production, distribution, consumption and the wider socioecological impacts of food systems – as well as food systems *processes*, such as management, organisation, measurement, and coordination. Governance, in this sense, involves a diversity of decisions that shape food systems; both *how they work* and *what they do*. Governance, then, includes policies at different levels – broadly understood as a 'statements of the government's position, intent, or action' (Williams, 2012) – but also the decisions that individuals and organisations take within a discursive policy environment that impact the food system. It refers both to the strategic and the incidental – the individual and collective – manners in which diverse rationalities, values and forms of knowledge are negotiated, reproduced, contested, and managed in practice. This approach builds on the idea of polycentric governance, which has emerged forcefully in the context of global environmental change (Oliver et al., 2021).

The past decade has seen a proliferation of systematic frameworks for visualising and analysing food systems (Foran et al., 2014; Gaitán-Cremaschi et al., 2020; Hasnain et al., 2020; Parsons et al., 2019), spurred in part by the global food crisis in 2007–2008, which starkly revealed the structural failures of the global food system. Such models are invaluable for conceptualising and communicating the complexity of connections, processes and interactions in food systems. What they have in common are the ideas that food

systems involve a diversity of actors across sectors and levels; that an intervention in one area of an interconnected food system will impact – positively or negatively – other parts of the system; and that understanding these impacts is important for developing or prioritising interventions.

Within scholarship on the political economy of food, also, the concept of food systems has been mobilised powerfully as a tool to examine the interactions between material and social processes and the role of policy in shaping those arrangements (Lang and Heasman, 2004; McMichael, 2000). It is curious, then, that many recent models of food systems do not include an explicit governance component. Of the 88 peer-reviewed 'food systems governance' publications systematically reviewed by Hospes and Brons (2016), only one explicitly includes governance as a component of the food system (Vermeulen et al., 2012). Neither governance nor policy appear as drivers or components in influential visualisations of the food system such as Ericksen (2008: 239).

The concept of governance appears in different ways, and with different potentials, across food systems literature. Some scholars have focused on the specific governance mechanisms available to state actors (Parsons, 2022). Others have focused on the importance of networks and collaboration between state agencies for effective governance. Scholarship from South Africa, for example, has emphasised the need for effective 'governance arrangements' to respond to a fragmented institutional landscape (Pereira and Drimie, 2016).

Recent scholarship has increasingly adopted more polycentric and relational approaches to food systems governance (SAPEA, 2021; Sonnino and Milbourne, 2022), which expand, diversify and problematise the governance landscape. Westhoek et al. (2016: 48), for example, argue: 'Governance is more than the formal functions of government but also includes markets, traditions and networks, and non-state actors such as firms and civil society'. This approach to food systems governance has been particularly effective in drawing attention to the ways that differential power relations play out in the contemporary food system. Scholarship in this area

has identified, for instance, the governance challenged posed by concentrated corporate power within the food system (Clapp, 2021).

This is to say that governance has been framed variously as a specific set of mechanisms (particularly available to the state), a set of relationships between state institutions, and a set of relations between the state and a much wider constellation of actors. This diversity is not in itself an issue, but it does speak to a lack of consensus regarding the role and potentials of 'governance' to transforming food systems. Related to this, the agency of the state as a food systems governance actor remains unresolved.

In the past three decades, in response to the changing role of the state, the idea of governance has emerged to describe the collective activities through which the rules that regulate the production, distribution and use of resources are made, contested and implemented (Heywood, 2014). Governance, in this sense, operates both within and beyond formal, representative political structures and the apparatus of the state. Far more than the related concept of management, '[governance] is fundamentally about power, interests, values, authority, and legitimacy' (Dasandi et al., 2015: 64). In an influential article, Treib et al. (2007) suggest that governance can be understood (and analysed) through the related dimensions of politics, policy and polity, which are associated with distinct modes of governance both within the sphere of state intervention and beyond the state in the sphere of what they term, 'societal autonomy'.

An important trend identified within urban governance scholarship is the deprivileging of the national regulatory level and the expansion and growing prominence of both sub-national and supranational levels in governance processes (Brenner, 2000; Keil, 1998). This trend is reflected in recent food scholarship that emphasises the vital role that cities and sub-national formations play as 'transition spaces' (Moragues-Faus, 2020) through which new food systems governance structures and processes are developed, with the potential to destabilise dominant food regimes (Mattioni et al., 2022).

There are two contributions that are particularly useful for making sense of the variegated food systems governance landscape (and discourse). The

first is Foucault's notion of governmentality, which emerged through his historical analyses as a way of characterising the transition from feudal societies to modern states. Governmentality refers to the ways that norms, values and rationalities are internalised and reproduced across society. We see echoes of these arguments in literature on how diverging understandings of important concepts such as 'sustainability' (Lang and Barling, 2012) and 'resilience' (Soubry and Sherren, 2022) represent a food system governance challenge.

Foucault (2008: 77) argued that the state itself should not be understood as an abstract or absolute, rather as a set of practices; as 'nothing but the mobile effect of multiple governmentalities'. Governmentalities, then, are central to the ways that the state exercises what Foucault terms, 'biopower', which describes the governance, administration and regulation of positive social (re)production, for example, through the coordination of healthcare and food systems, as well as the normalisation of sets of values and behaviours. While state sovereign power is exercised primarily through violence, the law, and the judiciary, biopower, by contrast, is exercised through a multiplication of 'continuous regulatory and corrective mechanisms based on knowledge' (Oksala, 2013: 321), including norms, policies, strategies and tactics. The related notions of biopower and governmentality draw attention to the ways that governments (as well as other governance actors) exercise power both directly and indirectly over food systems.

In the context of the changing role of the state, a second important contribution comes from scholarship that emphasises the networked relations between state and non-state actors, and the role of such networks in processes of governance (leGales, 2001; Swyngedouw, 2004). While Foucault emphasised the rationalities that shape governmentality, others have emphasised the ways that governance emerges as a function of the power differentials between diverse actors and institutions; 'this relative power is a product of the resources of each organization, of the rules of the game and of the process of exchange between organizations' (Rhodes, 2007: 1246). In other words, governance inhabits the more-and-less formally networked yet unequal relations between individuals and organisations within and across territories. We see this argument in literature emphasising that food systems transformation will be the outcome of power struggles, contestations and vested interests across the public and private spheres (SAPEA, 2021: 153).

In their systematic review, Hospes and Brons (2016) delineate some main strands within food systems governance research. Without repeating their analysis, it is useful to draw attention to four key areas of food systems governance scholarship around: food policy (Barling et al., 2002; Lang et al., 2001; Maxwell and Slater, 2003); food regimes and private governance (Friedmann, 1995; Hospes, 2014); urban governance (Blay-Palmer et al., 2013; Sonnino, 2013); and multi-level governance (Forster and Escudero, 2014; Sonnino et al., 2014). Each body of literature, they argue, represents a particular framing and set of assumptions about how diverse challenges intersect and compound one another, as well as the types of policies, interventions, and governance structures that are necessary for change. A focus on food policy, for example, might emphasise policy coherence, while a multilevel governance approach might emphasise vertical integration of decision-making processes.

A wide range of scholarship has also identified and categorised key stakeholders that shape food systems at the national and international levels, including state actors (Campbell, 2004; Sadler et al., 2014; Zaharia et al., 2021). Garton et al. (2021), for example, present a thorough stakeholder analysis of the international nutrition policy space. The authors develop a matrix of interactions between different types of organisations and institutions: government; CSOs, media and academia; private sector; trade partners and international governmental organisations. While mapping such interactions is undeniably valuable for clarifying the policy space (with strategic implications), such analyses can reproduce static and inelastic conceptualisations of actor-categories and their relations, which potentially limits the field-of-view for recognising overlooked sites of decision-making, agency, contestation, competing governmentalities and

relations, which are critical to food systems governance research.

Similarly, food systems scholars have rightly examined the role of the state as a governance actor, focusing particularly on how state policy regarding food systems might be leveraged (Lang et al., 2001; Mansfield and Mendes, 2013). A diversity of work in this space has called for food policy coherence, emphasising the need for both horizontal policy coordination and vertical integration between nested levels of government (Parsons, 2019). Others have focused more explicitly on the governance of policy processes and the role of policy in bringing about systems change, emphasising, for example, the importance of adaptive governance structures and processes, and the need for continuous organisational learning to facilitate multistakeholder interactions (Oliver et al., 2021).

However, such a focus on state mechanisms potentially undervalues the broader set of actors in polycentric governance of food systems and the multiple relations through which governance structures emerge (Van Bers et al., 2019). Other scholarship, for example, has drawn attention to the critical role of social movements such as Via Campesina (Brem-Wilson, 2018), alternative food networks (Harris, 2009) and the role of farmers' networks (Anderson et al., 2019) in national and international governance of food production and distribution. Less well studied are the more diffuse and everyday processes of governance; the ways that food systems rationalities and governmentalities are circulated, negotiated, reproduced, contested and transformed through the decisions, actions, and interactions of ordinary people, including but not limited to food producers.

Equally overlooked is the 'porous' and 'blurred' nature of stakeholder categories, and the ways these characteristics shift across institutional levels. While categories such as 'government' and 'private sector' can serve useful strategic purposes, they do not reflect the reality that individuals and organisations frequently play multiple roles simultaneously: across the public and private sector, as professionals and hobbyists, as producers and consumers, etc. It is important to recognise then, how these different categories – these subjects – are produced through

particular social conditions and contexts, rather than reflecting universal or totalising identities (Gibson-Graham et al., 2001).

Scholarship has drawn particular attention to the professional networks, the incidental knowledge transfer processes, and the indefinite distinctions between actors working at the research-policy interface (Shaxson et al., 2016; Stone, 1997). We might think about stakeholder categories, then, as porous in the sense that individuals frequently operate within and between multiple roles; and blurred in the sense the boundaries between state, private sector and civil society only come sharply into focus in time, place and context, rather than as abstract or immutable ideas. In this way, this article aligns with Wilson (2013), who rejects (on poststructuralist grounds) the use of totalising categories in the study of food systems.

Related to this, a further challenge for food systems governance research and practice is recognising and engaging with intersectional identities within the food system (Moragues-Faus and Marsden, 2017). Given that people can play multiple roles – policy-maker and consumer; producer and campaigner, etc. – it is also vital to recognise how each individual holds multiple identities in relation to gender, sexuality, class, ethnicity, age, ability and migration status, amongst many others, which impacts their agency to change food systems. Crucially, these intersecting identities amount to significant variations in voice and vulnerability for individuals across diverse food systems governance processes and spaces, which influences each individual's change-making potentials (Hankivsky and Cormier, 2011), and suggests that food systems governance can potentially either reproduce or challenge broader structural inequalities (Haysom, 2015).

A further key development over the past two decades, in response to growing acceptance of the social determinants of health (Friel and Marmot, 2011), has been the expansion of the boundaries of food systems governance beyond policies that narrowly address issues of food access and health. Drawing on the example of New York City, Cohen and Ilieva (2021) evidence how the remit of food systems governance has broadened to include issues such as labour, housing and poverty, amongst many

others. In other words, food system governance has expanded (in some contexts) to address structural drivers of inequality within and beyond food systems. Through this expansion, the diversity and number of governance actors, processes, values, and rationalities multiplies significantly, representing a further challenge for food systems governance research.

Relational approaches to food systems governance have undoubtedly advanced the field – recognising that governance emerges as a function of diverse visions, resources and values between unequal actors across the state, private, and civil society spheres. However, they also draw attention to the challenge of mobilising such diffuse and plural (relational) framings for understanding and enhancing food systems governance. If governance is disparate and heterogeneous but ubiquitous throughout a food system – if it is rooted simultaneously in identity politics, market forces, competing governmentalities and networked relations – then where to begin? The spatiality (and territoriality) of these governance structures offers some useful starting points.

III Spaces and territories of food systems governance

There now exists a vast literature on the geographies of food governance particularly connected to the concepts of urban food systems (Battersby and Watson, 2019; Tefft et al., 2020) territorial food systems (Haysom, 2015), including city-regions (Blay-Palmer et al., 2018); and local, place-based food systems (Papaoikonomou and Ginieis, 2017); as well as ever-present engagement with issues of scale and scaling-up (Hammelman et al., 2020; Mount, 2012). Much of this literature speaks implicitly to many of the issues raised in the previous section. However, this section explores how critical geographical scholarship on both the social production of space and relational approaches to place can offer new directions for food systems governance research by enhancing links between these sub-discourses.

Compared to the literature that focuses on the process of food systems governance and the actors involved, discourses on the spatiality and territoriality of governance are narrower and clustered around distinct socio-spatial scales. But in many ways, this literature has significantly advanced understandings of how food systems are governed and the role of governance in bringing about food systems change.

Scholarship on urban food systems governance, for example, has emerged as a particularly vibrant sub-discourse. Scholars have recognised the potentials of urban context for the development of new governance mechanisms (Moragues-Faus and Morgan, 2015) as well as the challenge understanding the complexity of urban food systems governance in rapidly urbanising, low-income settings (Smit, 2016; Warshawsky, 2016).

This literature reflects growing attention on cities as concentrations of population and capital, as well as the critical role that cities and processes of urbanisation play in territorial development. While simplistic associations of 'the urban' with food consumption and 'the rural' with production have been progressively dismantled and nuanced – here, the idea of city-regions that operate beyond rural-urban binaries and municipal boundaries (Blay-Palmer et al., 2021) has been particularly influential – the use of 'urban' and 'rural' as spatial categories remains pervasive in food systems thinking. This is reflected, for example, in literatures on urban food policy, urban agriculture and the governance of urban food systems (Blay-Palmer et al., 2016; Moragues-Faus and Battersby, 2021; Moragues-Faus and Morgan, 2015; Watson and Battersby, 2019).

The concept of *place* has also featured prominently in food systems governance literature (Harris, 2010; Sonnino and Milbourne, 2022). In an influential article, Sonnino et al. (2016: 486) argue for 'a place-based approach [to food security that] engages with the complex multi-actor, multilevel and reflexive political and social structures that support the emergence of distinct food security trajectories in a highly contested and unequal foodscape'. This is to say that relational conceptions of place can offer a conceptual foothold within a complex food systems governance landscape. To some extent the prominence of 'place' reflects the expanded conceptual role of 'place' and 'placemaking' within human geography (Amin, 2004;

Massey, 2005). But it also reflects a specific engagement with issues of *localism* within food systems governance literature (Feagan, 2007).

Similarly, the concept of territorial food systems has gained traction in recent years, reflecting the idea of a post-modernisation, 'integrated territorial paradigm [which] aims to reinforce the capacity of food systems to valorise specific territorial resources and social relations of proximity' (Renting and Wiskerke, 2010: 1903). This paradigm demands the reconceptualisation of governance processes away from traditional jurisdictional boundaries and spatial scales, and towards a more integrated and multiscalar set of governance mechanisms that prioritise local participation in governance processes, such as at the city-scale (Blay-Palmer et al., 2018).

The idea of territory as it appears within much of the recent food systems governance literature contrasts with more orthodox readings on territory as a 'state-space'. Lefebvre (2009: 228), for example, wrote that the state and its territory are mutually constitutive, suggesting that the idea of territory is a spatial expression of the modern state, comprising both the state's domestic territorial activities and the ways that these territories extend internationally. Lefebvre's argument that the state plays a crucial role in the capitalist processes of accumulation through the production and rationalisation of space is useful for framing the fundamental relationships between nation states, governments, territories and the circulation of capital. Territory, as state-space, can be thought about as both the medium and site of food systems governance. However, this conception of territory remains state centric.

This contrasts with the idea of territory that has re-emerged as a key concern in the field of geography (Elden, 2010; Painter, 2010), in which the direction of travel has been away from conceptions of territory as state-space, towards more networked, nuanced, and complex understandings of this relationship. There remains no clear consensus as to what precisely 'territory' means; however, the idea is increasingly used in a way that is decoupled from the nation state. As Trauger (2014: 1141) describes, '[the] myth of the territorial basis of the Westphalian state system is increasingly challenged and is being replaced with a network ontology in which

sovereignty is an emergent property of social relations'. This suggests that governance of food territories operates within and beyond jurisdictional and institutional boundaries, within and beyond national borders. This conception of territory speaks closely to the ways that 'territory' has been mobilised within food systems governance literature; less as an expression of sovereignty or control, and more as a way of opening up new spatial imaginaries for transformation within and between socio-spatial scales.

Elsewhere, Sassen (2013: 23) has emphasised the need for more analytic conceptions of territory beyond the nation state, beginning with the idea that territory is 'a capability with embedded logics of power and of claim making. [...] part of diverse complex organizational assemblages, with variable performance in relation to authority and rights'. In mobilising this concept analytically, Sassen identifies 'emergent territorial formations', such as global networks of financial centres as well as global networks local activists, which operate across and beyond the auspices of state territories. This raises important issues for food systems governance research, not least by drawing attention to the interdependent spatial-relational nature of food systems governance; if food systems governance operates both within and across state spaces, then how might we characterise the claims of diverse and unevenly distributed governance actors? How do these governance actors organise, communicate and interact with one another? Where and how are they embedded and what are their change-making potentials? And crucially, what, then, is the role of public policy (and thus also the state) in food systems governance?

The re-emergence of 'territory' speaks to a wider critical engagement with the relationships between the state and space, that has played out in both academic discourse (Agnew, 2009; Ong, 2007) and social movements, such as the food sovereignty movement. The idea of food sovereignty resonates with Lefebvre's argument that the state facilitates processes of capital accumulation; food sovereignty scholars and activists have long argued that governments have played a key role in facilitating the capitalist transformation of rural spaces (Pimbert, 2008). However, there are important differences with regards to the idea of territory. The Proceedings

of the 2007 forum for food sovereignty (Nyéléni, 2007), for example, articulated an idea of territory that is not dependent on nation states, and which emphasises the centrality of indigenous and traditional use of land, beyond state boundaries. This represents a counter-hegemonic approach to the ideas of sovereignty and territory, which is dependent on knowledge, practices and identity rather than the legitimacy or authority of the state.

Critical readings on the concept of space can be useful for reconciling the spatial and the relational characters of food systems governance. For example, Lefebvre's (1991) contributions to the theorisation of space, which have been incredibly influential within the field of geography, have largely been overlooked in the context of food systems governance and offer further opportunities for inquiry. His triad of spatial practice, representation of space and spaces of representation constitutes a critical ontological intervention regarding the nature of space, which elucidates the dialectical processes through which space is produced, rationalised, embodied and experienced. A key contribution of Lefebvre's spatial ontology is the idea that social life does not happen in space, it *is* space; space is continuously produced, reproduced and transformed through social relations and social life. In this way, governance can be understood, not as the management of a system within a neutral arena, but as the production and rationalisation of space *through* governance. Read through a lens of Lefebvre's spatial ontology, it becomes impossible to separate the relational from the spatial characterises of food systems governance; each necessarily implies the other.

Lefebvre's interventions are also useful in pushing us to recognise and engage with the diversity of ways that space, in the broadest sense, has been an incidental focus of much food systems literature, which brings together a diversity of spatial concepts and engages with space in numerous different ways. Food systems governance literature routinely engages with material dimensions of space such as the accessibility and availability of land (Harvey and Pilgrim, 2011), the maldistribution of food and nutrition security (Amarasinghe et al., 2005), and 'food deserts' (Shaw, 2006). It also engages with socio-political

dimensions of space, including issues of property, landscapes and land reform (Padró et al., 2017; Rosset, 2009). There is also a more limited engagement with notions of 'policy spaces', 'spaces of innovation', as well as political-spatial arguments made for 'subversive and interstitial' (Galt et al., 2014) and 'autonomous' (Wilson, 2013) food spaces.

This diversity of forms of engagement with issues of distribution, spatial politics and spatial practices across food systems and food systems governance literature encourages us to think about the manifold material and social spaces which produce and are produced by the interactions between food systems actors (individually and collectively), which frequently exist beyond the state, and through which food systems are governed.

There is value, too, in looking beyond Lefebvre to nuance the relationship between food governance relations and their spatiality. Pierce and Martin (2015), for example, have argued that contemporary epistemologies of place, which emphasise the disparate, emergent and unstable nature of place, enable scholars to incorporate the analytical potentials of Lefebvre's spatial ontology with what they term 'hybrid and multiple' epistemologies of place; both *what space is*, and *how we know it*. Together, critical readings of space and place point to new opportunities for food systems governance research. Both, in different ways, speak to the social production of space. What is required, then, is an approach to food systems governance that examines how different spatial domains are connected and understood in relation to one another. As Sonnino et al. (2016: 484) argue, 'what is needed is a comparative spatial approach to food security and vulnerability that moves far beyond oppositional scalar discourses and brings into focus the different constellations of actors, activities and sectors of intervention'.

Given that food systems governance *is* spatialised – decisions are made in material space both within and beyond food territories – and that food systems governance affects the production of space – not least through the rationalisation of space through planning, trade, and infrastructure development policies – the interdependent spatial-relational qualities of food systems governance must be a focus of future research.

IV New directions for food systems governance research and practice

Drawing on critical perspectives on the state-space-territory triad points towards new spatial and relational directions for food systems governance research and practice within and between levels of public policy, institutional structures, and levels of government. These perspectives can potentially contribute towards more critical, analytical, spatial and geographically sensitive forms of food systems governance research. This section sets out a research agenda for food systems governance research that focuses on three analytical areas, focusing on issues and questions raised, as well as the extent to which these areas represent underexamined leverage points for enhancing the role of governance in food systems transformation.

1 Intersectional, reflexive and adaptive approaches to food systems governance actors and their interactions across socio-spatial scales

The state-space-territory triad encourages us to bridge diverse literatures on food systems governance and to recognise that actor-networks and polycentric governance processes do not exist abstractly or aspatially, or only in and through place; networks of governance actors are continuously reconstituting food territories just as they are reconstituted through these territories. This encourages us also to consider the circulation of different rationalities and governmentalities as themselves forms of spatial praxis (including through the concept of territory itself). This lends itself to a research agenda that takes as its starting point the ways that relations between intersectional and multiple identities shift across spatial frames.

To deconstruct naturalised assumptions about categories of stakeholders and the power imbalances therein, food systems governance research should adopt analytical and critical approaches to the multiple identities and roles that many individuals and organisations play within food systems. This suggests a research agenda that engages concurrently with the multiple roles that individuals, collectives, organisations and institutions play in food systems governance; the intersectional identities held by food systems governance actors; and the different types of decisions and differential levels of agency that are associated with these different roles and identities; and how these forms of agency are mobilised.

Empirical research in this area might examine the different mechanisms by which certain actors – and with them particular rationalities and governmentalities – gain prominence and influence within food systems governance. What are the strategies that different actor groups use to exert their influence in food systems governance? And critically, how do different actors formulate, enact and respond to different strategies at different socio-spatial scales?

Recognising that agency is a product of the relative power of different actor groups, a key task is to understand and characterise the diverse ways that governance actors develop and mobilise power to impact food systems through strategies such as capacity-building, horizontal organisation, advocacy, financial resourcing and regulation, amongst many others. How is power to shape and govern food systems institutionalised and mobilised, and what are the social infrastructures of food systems governance, how to they operate and with what consequences on food systems?

At the same time, a focus on issues of identity, relations and the porous and blurred nature of stakeholder categories pushes us to recognise and engage with the myriad policy processes, networks and individual and collective decisions, which together constitute food systems governance. An intersectional approach to food systems governance is critical for revealing the ways that agency to impact food systems manifests and is experienced by different groups, in different ways at different times.

In practice, this research can help us to expose and challenge the ways that unequal relations are reinforced across socio-spatial scales and how food governance processes, not least policymaking, need to reimagine the politics of participation at every scale, from the local to the global. This can have implications for how food policy is made –

recognising that categories of governance actors, such as 'farmer' and 'consumer', for example, take on different meanings between the regional and national levels. This can also have significant implications for designing coherent food policy. Recognising that relations between food systems governance actors shift with socio-spatial scale implies that power and vulnerabilities can shift with them. This suggests that food systems policies should not thought about as coherent or incoherent in the abstract, rather, their coherence only exists in and through situated time and place.

An intersectional, reflexive and adaptive approach to the interactions between food systems governance actors also pushes us to engage with increasingly differential, yet coexisting, modes of food systems governance, in theory and practice. We can recognise, for example, how alternative, place-based approaches to food system governance vary considerably from context to context; with different local power relations, strategic formations and spatial embeddedness (Rossi et al., 2019). (Such approaches can exist in isolation, but are more frequently networked and overlapping.) More significantly, such diverse approaches, rooted in local specificity, coexist in contrast (or conflict) with conventional, supply chain-led approaches to food systems governance. A food systems governance research agenda, then, should engage with the relations and interactions between these differential modes of governance and our understandings of them; operating variously in dialogue or contradiction with one another. This pushes us towards a critical and comparative agenda that embraces the plurality and irreconcilability of different conceptions of governance, and their attendant structures of power.

In terms of identifying leverage points for food systems transformation, a critical engagement with governance actors and relations pushes us to think about the opportunities beyond 'traditional' food systems governance actors and to recognise the importance of other areas of public policy, for example, in relation to education, housing and infrastructure development, as consequential sites of food systems governance. Moreover, it pushes us to look beyond the state and to focus on the networked governance relations that exist across the food

system and at multiple levels as well as the limitations of food policy, and even public policy more broadly, to transform food systems.

2 Critical, plural approaches to working with and across jurisdictional-institutional levels

The State-space-territory triad also points us towards the value of working dynamically and pluristically between the spatial and institutional dimensions of food systems. This opportunity calls for an iterative and fundamentally open approach to food systems governance research. It demands a flexibility and a methodological orientation towards the contradictions and irreconcilable differences that can exist within processes of food systems governance at different levels.

This article is sympathetic to the argument that 'greater theoretical coherence and methodological consistency in terms of what constitutes food systems governance and how it is measured is required to facilitate more powerful and generalisable explanatory findings' (Van Bers et al., 2019: 96). However, critical readings of the ideas of space and territory highlight the importance of overlapping and plural forms of governance structures that exist at and between different levels. Such an approach demands adaptability in terms of methodology, and to recognise the value of irreconcilable experiences and processes that coexist simultaneously at multiple levels. The diversity of decisions that affect the inputs, processes, outcomes and externalities of food systems demands a heterogeneous and plural approach to understanding this diversity. In the context of operationalising food systems as both an object of research and approach to research, consistency, analytical coherence and 'neatness' potentially direct us away from engaging with food systems in their complexity across time and space.

Rather, a research agenda for food systems governance should recognise the epistemological and strategic value of working dynamically between different levels of public policy institution. This means not approaching one level of decision making and governance as analogous to another; it means recognising firstly that some elements of food systems might be influenced primarily by local

decisions, while others influenced to a greater extent by regional, national or international decisions and governance processes; and it means recognising that these scales of power and influence will shift through time.

This demands working generatively with the contradictions of any place-based food system and recognising that opportunities to enhance governance processes and food systems outcomes can emerge through strategic engagement across multiple levels of government and institutions. Critical approaches to the idea of territory direct researchers towards the overlapping relations and sovereignties-jurisdictions-constituencies that impact food systems. There is also great insight to be gained by juxtaposing and working dynamically between spatial framings – the local food system, the urban food system, the global food system, etc. – to recognise the tensions and limitations of each specific conceptualisation of the food system *in place*, and the governance challenges therein.

This implies a strategic engagement with the politics of scale in food systems governance. This means recognising that 'scale' is a social and political construct (Marston, 2000). And also that there are strategic opportunities to be found by working across scales; what some have referred to as 'scale jumping', whereby 'political claims and power established at one geographical scale are expanded to another' (Staeheli, 1994), or 'scale bending', 'in which entrenched assumptions about what kinds of social activities fit properly at which scales are being systematically challenged and upset' (Marston et al., 2005).

Critical readings of state-space-territory relations also direct us towards the tacit spaces and processes through which food systems are governed, and the ways these shift and vary within and between institutional-jurisdictional levels. We might consider, for example, the ways that particular elements of food value chains are primarily subject to international regulation, which are subject to political and economic pressures in entirely different geographical contexts. The triad also affirms the importance of engaging flexibly and strategically between levels of government to make incremental or transformative improvements to the food system. These liminal governance spaces, which emerge across and between jurisdictional-institutional levels, represent crucial opportunities for shaping and reshaping food systems.

In terms of how this analytic area might be mobilised through research, we might begin by focusing on the interactions between policies at multiple levels of government and the ways that they impact food systems. We might also recognise the limitations and potential synergies between policies at different levels and across multiple overlapping jurisdictions.

Perhaps even more significantly, a food systems governance agenda should engage with the ways that the territorial food paradigm interacts and intersects with pre-existing spatial-territorial governance paradigms, such as the emergence of a globalised approach to food supply chain regulation in the 1990s through the development of global food standards and conventions (Burch et al., 2013). These governance paradigms have not disappeared or been replaced in the past two decades. However, the interactions between territorial food systems governance approaches and dominant (and latent) governance paradigms are not well understood, particularly across different contexts. This directs us potentially towards a more cosmopolitan spatial-territorial governance landscape, in which competing governance paradigms operate in relation to one another. Again, this points to the importance of further, critical, comparative research. This demands a plural approach to knowledge production that engages with the contradictions that emerge across multiple levels of decision-making; the ways that these potentially irreconcilable rationalities, ways of knowing and ways of operating, manifest within and shape food systems. This latter point has implications also for wider governance practice, echoing Haysom (2015) who signifies food systems governance as a potential pathway to emergent forms of pluralistic governance more broadly.

3 Critical engagement with the spatiality of food systems governance

The state-space-territory triad complements and builds upon scholarship on the relational readings of

place in advancing food systems governance research. Specifically, the triad draws greater attention to the significance of incidental spaces (and spatial concepts) as sites of food systems transformation. Recent food systems governance scholarship has articulated the need to reconceptualise and revaluate food systems governance *in place*. The challenge, and the opportunity, then becomes how to integrate multiple readings of place and territory that operate simultaneously at multiple levels and how to better reflect that space itself has an agency within food systems governance.

The state-space-territory triad draws our attention to the spatiality of food systems governance. This pushes us in several productive directions in terms of food systems governance research and leverage points for food systems change. The first is in relation to the spatial distribution of food systems decisions, recognising that governance processes are made in material space – in boardrooms, in government offices, in rural fields, etc. – and that these spaces of governance are unevenly distributed within and across localities, regions and nations, amongst other overlapping and variegated territories. A critical research agenda should engage with the spatiality of decision making, the ways that these decisions operate within and beyond food system territories, and the associations between certain forms of governance processes and particular material spaces. Such an approach can highlight strategic opportunities for making and transforming food policy and food systems more broadly.

The second is in relation to the social production of space. Recognising that governance processes operate in and through space, food systems governance research must consider the ways that spaces are rationalised, and so produced, through food systems governance. This pushes us to consider the spatial imaginaries that are produced and circulated within food policy and other governance processes, and with what material-spatial implications for society more broadly. How do decisions regarding food production intersect with different actors' visions for productive cities, regenerative landscapes, or ecosystem services, and with what policy outcomes?

The third is a more critical engagement with spatial categories in food policy and food systems

governance, not least: local, rural, urban, scale and place. Such critical engagement can contribute to the development of new interrogations and arguments, for example, by pushing as towards trans-local readings of food systems governance that exist between places rather than belonging to one location or another.

Fourth and finally, critical engagement with the spatiality of food systems pushes us to look for underexamined leverage points for food systems change. First and foremost, in practical terms this means a greater engagement with the potentials of planning and land use strategies for advancing food systems change. The role of land use change and planning policies represents an under-theorised and under-leveraged space of food systems governance. This pushes us towards researching the multiple and layered connections between food and land, not only in terms of land for growing food, but also the relationships between the political economy of land and socio-economic inequality and food insecurity, as well as the potentials of land reform, capital gains and inheritance tax reforms as mechanisms of food systems governance. Currently food policy research is largely separated from issues of housing, infrastructure development, and even sustainable land management. Yet, planning processes and policy represent vital leverage points for advancing more sustainable and equitable food systems.

V Concluding remarks

This article mobilised a state-space-territory triad to examine food systems governance literature and reveal opportunities for future research and action. It has drawn attention to the diffuse and heterogeneous nature of food systems decision-making and overlooked spaces of governance; the leverage points that emerge at the interstices of global and local socio-ecological (and capital) flows; and the institutional structures of policy and governance that exist at nested institutional-jurisdictional levels. The triad of state-space-territory is particularly useful for unpacking the opportunities and contradictions that emerge across different scales of governance, but it is less useful for helping us to unpack the relations between intersectional identity and the multiple roles

that different actors and organisations play in food systems governance.

The triad points towards some specific opportunities for future, geographically sensitive research that does not conceptually separate the relational from the spatial; and that is responsive to interrelated configurations of power, place and identity as they shift through time. The triad also pushes us to engage with the changing role of governance in food systems transformation: both in terms of the redistribution of agency within the food system and in terms of the reterritorialisation of national and international decision-making powers.

A further challenge is how researchers and food governance actors can pivot beyond issues of food systems governance and consider how we conceptualise and operationalise 'food systems' as an organising principle for wider societal governance processes. The greatest potential of food systems governance, in this sense, might lay outside of food systems; food systems governance could be a key strategic approach to meeting the much wider set of urgent social, ecological and political challenges we face. These represent important issues for further research.

Each of the analytic areas for future research set out here has the potential to build upon and complement the others. A focus on the actor-networks and spatiality of food systems governance draws attention to the idea socio-political and the spatial are inseparable. While a pluralistic approach to working with the irreconcilable differences and opportunities that emerge across different levels of public policy offers new readings of space, territory and scale as material and policy opportunities for governance and change. A geographically sensitive food systems governance agenda must foreground power and politics within an inherently spatialised and ever-shifting governance landscape.

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ORCID iD

Christopher Yap ⓘ https://orcid.org/0000-0002-8629-2360

References

Agnew J (2009) *Globalization and Sovereignty.* Lanham: Rowman & Littlefield Publishers, Inc.

Alkon AH and Mares T (2012) Cultivating food justice. *Agriculture and Human Values* 29(3): 347–359.

Allen P (2010) Realizing justice in local food systems. *Economy and Society* 3(2): 295–308.

Amarasinghe U, Samad M and Anputhas M (2005) Spatial clustering of rural poverty and food insecurity in Sri Lanka. *Food Policy* 30(5–6): 493–509.

Amin A (2004) Regions unbound: towards a new politics of place. *Geografiska Annaler* 86(1): 33–44.

Anderson CR, Maughan C and Pimbert MP (2019) Transformative agroecology learning in Europe: building consciousness, skills and collective capacity for food sovereignty. *Agriculture and Human Values* 36(3): 531–547.

Barling D, Lang T and Caraher M (2002) Joined-up food policy? the trials of governance, public policy and the food system. *Social Policy and Administration* 36: 556–574.

Battersby J and Watson V (2019) *Urban Food Systems Governance and Poverty in African Cities*. Abingdon: Routledge.

Biel R (2016) *Sustainable Food Systems: The Role of the City*. London: UCL Press.

Blay-Palmer AD, Knezevic I, Andree P, et al. (2013) Future food system research priorities: a sustainable food systems perspective from Ontario, Canada. *Journal of Agriculture, Food Systems, and Community Development* 3: 227–234.

Blay-Palmer A, Santini G, Dubbeling M, et al. (2018) Validating the city region food system approach: enacting inclusive, transformational city region food systems. *Sustainability* 10(5): 1680.

Blay-Palmer A, Santini G, Halliday J, et al. (2021) City region food systems: building resilience to COVID-19 and other shocks. *Sustainability* 13(3): 1325.

Blay-Palmer A, Sonnino R and Custot J (2016) A food politics of the possible? growing sustainable food systems through networks of knowledge. *Agriculture and Human Values* 33(1): 27–43.

Borras SM, Franco JC and Suárez SM (2015) Land and food sovereignty. *Third World Quarterly* 36(3): 600–617.

Brem-Wilson J (2018) Legitimating global governance: publicisation, affectedness, and the committee on world food security. *Third World Thematics* 3(5–6): 605–625.

Brenner N (2000) The urban question as a scale question: reflections on Henri Lefebvre, urban theory and the politics of scale. *International Journal of Urban and Regional Research* 24(2): 361–378.

Brenner N and Elden S (2009) Henri Lefebvre on state, space, territory. *International Political Sociology* 3(4): 353–377.

Burch D, Dixon J and Lawrence G (2013) Introduction to symposium on the changing role of supermarkets in global supply chains: from seedling to supermarket: agri-food supply chains in transition. *Agriculture and Human Values* 30(2): 215–224.

Campbell H and Dixon J (2009) Introduction to the special symposium: reflecting on twenty years of the food regimes approach in agri-food studies. *Agriculture and Human Values* 26(4): 261–265.

Campbell MC (2004) Building a common table: the role for planning in community food systems. *Journal of Planning Education and Research* 23(4): 341–355.

Clapp J (2021) The problem with growing corporate concentration and power in the global food system. *Nature Food* 2: 404–408.

Cohen N and Ilieva RT (2021) Expanding the boundaries of food policy: the turn to equity in New York City. *Food Policy* 103: 102012.

Dasandi N, Hudson D and Pegram T (2015) Governance and institutions. In: Waage J and Yap C (eds) *Thinking Beyond Sectors for Sustainable Development*. London: Ubiquity Press, 63–76.

Duncan J, Carolan M and Wiskerke JSC (2021) Regenerating food systems: a socio-ecological approach. In: Duncan J, Carolan M and Wiskerke JSC (eds) *Routledge Handbook of Sustainable and Regenerative Food Systems*. Abingdon: Routledge, 1–11.

Duncan S and Savage M (1989) Space, scale and locality. *Antipode* 21(1): 179–206.

Elden S (2010) Land, terrain, territory. *Progress in Human Geography* 34(6): 799–817.

Ericksen PJ (2008) Conceptualizing food systems for global environmental change research. *Global Environmental Change* 18(1): 234–245.

Ericksen P, Stewart B, Dixon J, et al. (2012) The value of a food system approach. In: Ingram JSI, Ericksen PJ and Liverman DM (eds) *Food Security and Global Environmental Change*. London: Earthscan, 25–45.

Feagan R (2007) The place of food: mapping out the "local" in local food systems. *Progress in Human Geography* 31(1): 23–42.

Foran T, Butler JR, Williams LJ, et al. (2014) Taking complexity in food systems seriously: an interdisciplinary analysis. *World Development* 65: 85–101.

Forster T and Escudero AG (2014) *City Regions as Landscapes for People, Food and Nature*. Washington, DC: EcoAgriculture Partners, On Behalf of the Landscapes for People, Food and Nature.

Foucault M (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978–79 (G. Burchell, Trans.)*. London: Palgrave Macmillan UK.

Friedmann H (1995) The international political economy of food: a global crisis. *International Journal of Health Services* 25: 511–538.

Friel S and Marmot M (2011) Action on the social determinants of health and health inequities goes

global. *Annual Review of Public Health* 32: 225–236.

Gaitán-Cremaschi D, Klerkx L, Duncan J, et al. (2020) Sustainability transition pathways through ecological intensification: an assessment of vegetable food systems in Chile. *International Journal of Agricultural Sustainability* 18(2): 131–150.

Galt RE, Gray LC and Hurley P (2014) Subversive and interstitial food spaces: transforming selves, societies, and society–environment relations through urban agriculture and foraging. *Local Environment* 19(2): 133–146.

Garton K, Swinburn B and Thow AM (2021) Who influences nutrition policy space using international trade and investment agreements? a global stakeholder analysis. *Globalization and Health* 17(1): 118.

Gibson-Graham JK, Resnick S and Wolff R (2001) Toward a poststructuralist political economy. In: Gibson-Graham JK, Resnick S and Wolff R (eds) *Re/Presenting Class: Essays in Postmodern Marxism*. Durham, USA: Duke University Press, 1–22.

Halvorsen S (2019) Decolonising territory: dialogues with Latin American knowledges and grassroots strategies. *Progress in Human Geography* 43(5): 790–814.

Hammelman C, Reynolds K and Levkoe CZ (2020) Toward a radical food geography praxis: integrating theory, action, and geographic analysis in pursuit of more equitable and sustainable food systems. *Human Geography* 13(3): 211–227.

Hankivsky O and Cormier R (2011) Intersectionality and public policy: some lessons from existing models. *Political Research Quarterly* 64(1): 217–229.

Harris E (2009) Neoliberal subjectivities or a politics of the possible? reading for difference in alternative food networks. *Area* 41(1): 55–63.

Harris EM (2010) Eat local? constructions of place in alternative food politics. *Geography Compass* 4(4): 355–369.

Harvey M and Pilgrim S (2011) The new competition for land: food, energy, and climate change. *Food Policy* 36: 40–51.

Hasnain S, Ingram J and Zurek M (2020) Mapping the UK food system. Available at: https://www.eci.ox.ac.uk/research/food/downloads/Mapping-the-UK-food-system-digital.pdf%0Awww.foodsecurity.ac.uk/uk-food-mapping (accessed 05 September 2021).

Haysom G (2015) Food and the city: urban scale food system governance. *Urban Forum* 26(3): 263–281.

Heywood A (2014) *Politics*. 4th edition. London: Palgrave.

Hospes O (2014) Food sovereignty: the debate, the deadlock, and a suggested detour. *Agriculture and Human Values* 31: 119–130.

Hospes O and Brons A (2016) Food system governance: a systematic literature review. In: Kennedy A and Liljeblad J (eds) *Food Systems Governance: Challenges for Justice, Equality and Human Rights*. Abingdon: Routledge, 13–42.

Keil R (1998) Globalization makes states: perspectives of local governance in the age of the worldcity. *Review of International Political Economy* 5(4): 616–646.

Lang T and Barling D (2012) Food security and food sustainability: reformulating the debate. *The Geographical Journal* 178(4): 313–326.

Lang T, Barling D and Caraher M (2001) Food, social policy and the environment: towards a new model. *Social Policy and Administration* 35: 538–558.

Lang T and Heasman M (2004) Diet and nutrition policy: a clash of ideas or investment? *Development* 47(2): 64–74.

leGales P (2001) Urban governance and policy networks: on the urban political boundedness of policy networks. A French case study. *Public Administration* 79(1): 167–184.

Leeuwis C, Boogaard BK and Atta-Krah K (2021) How food systems change (or not): governance implications for system transformation processes. *Food Security* 13(4): 761–780.

Lefebvre H (1991) *The Production of Space*. Oxford: Blackwell Publishing Ltd.

Lefebvre H (2009). In: Brenner N and Elden S (eds) *State, Space, World: Selected Essays*. Minneapolis: University of Minnesota Press.

Levkoe CZ (2006) Learning democracy through food justice movements. *Agriculture and Human Values* 23(1): 89–98.

Mansfield B and Mendes W (2013) Municipal food strategies and integrated approaches to urban agriculture: exploring three cases from the global north. *International Planning Studies* 18(1): 37–60.

Markard J, Raven R and Truffer B (2012) Sustainability transitions: an emerging field of research and its prospects. *Research Policy* 41(6): 955–967.

Marsden T, Hebinck P and Mathijs E (2018) Re-building food systems: embedding assemblages, infrastructures and reflexive governance for food systems transformations in Europe. *Food Security* 10(6): 1301–1309.

Marston SA (2000) The social construction of scale. *Progress in Human Geography* 24(2): 219–242.

Marston SA, Jones JP and Woodward K (2005) Human geography without scale. *Transactions of the Institute of British Geographers* 30(4): 416–432.

Massey D (2005) *For Space*. London: Sage.

Mattioni D, Milbourne P and Sonnino R (2022) Destabilizing the food regime "from within": tools and strategies used by urban food policy actors. *Environmental Innovation and Societal Transitions* 44: 48–59.

Maxwell S and Slater R (2003) Food policy old and new. *Development Policy Review* 21: 531–553.

McMichael P (2000) The power of food. *Agriculture and Human Values* 17(1): 21–33.

McMichael P (2009a) A food regime analysis of the 'world food crisis'. *Agriculture and Human Values* 26(4): 281–295.

McMichael P (2009b) A food regime genealogy. *The Journal of Peasant Studies* 36(1): 139–169.

McMichael P (2015) The land question in the food sovereignty project. *Globalizations* 12(4): 434–451.

Moragues-Faus A (2020) Towards a critical governance framework: unveiling the political and justice dimensions of urban food partnerships. *Geographical Journal* 186(1): 73–86.

Moragues-Faus A and Battersby J (2021) Urban food policies for a sustainable and just future: concepts and tools for a renewed agenda. *Food Policy* 103: 102124.

Moragues-Faus A and Marsden T (2017) The political ecology of food: carving "spaces of possibility" in a new research Agenda. *Journal of Rural Studies* 55: 275–288.

Moragues-Faus A and Morgan K (2015) Reframing the foodscape: the emergent world of urban food policy. *Environment and Planning A* 47(7): 1558–1573.

Mount P (2012) Growing local food: scale and local food systems governance. *Agriculture and Human Values* 29(1): 107–121.

Nyéléni (2007) *Proceedings of the forum for food sovereignty held in Selengue*. Mali, February 23-27.

Available at: https://nyeleni.org/DOWNLOADS/Nyelni_EN.pdf (accessed 01 June 2022)

Oksala J (2013) From biopower to governmentality. In: Falzon C, O'Leary T and Sawicki J (eds) *A Companion to Foucault*. Oxford: Wiley Blackwell, 320–336.

Oliver TH, Benini L, Borja A, et al. (2021) Knowledge architecture for the wise governance of sustainability transitions. *Environmental Science & Policy* 126: 152–163.

Ong A (2007) *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*. Durham, USA: Duke University Press.

Padró R, Marco I, Cattaneo C, et al. (2017) Does your landscape mirror what you eat? a long-term socio-metabolic analysis of a local food system in Vallès county (Spain, 1860–1956–1999). In: Fraňková E, Haas W and Singh S (eds) *Socio-Metabolic Perspectives on the Sustainability of Local Food Systems*. New York: Springer, 133–164.

Painter J (2010) Rethinking territory. *Antipode* 42(5): 1090–1118.

Papaoikonomou E and Ginieis M (2017) Putting the farmer's face on food: governance and the producer–consumer relationship in local food systems. *Agriculture and Human Values* 34(1): 53–67.

Parsons K (2019) *Integrated Food Policy: What is it, and How Can it Help Transform Food Systems?* London: Centre for Food Policy.

Parsons K (2022) *12 Tools for Connecting Food Policy*. London: Food Research Collaboration.

Parsons K, Hawkes C and Wells R (2019) *Understanding the Food System: Why it Matters for Food Policy*. London: Centre for Food Policy.

Patel R (2009) What does food sovereignty look like? *Journal of Peasant Studies* 36(3): 663–706.

Pereira L and Drimie S (2016) Governance arrangements for the future food system: addressing complexity in South Africa. *Environment: Science and Policy for Sustainable Development* 58(4): 18–31.

Pierce J and Martin D (2015) Placing Lefebvre. *Antipode* 47(5): 1279–1299.

Pimbert M (2008) *Towards Food Sovereignty: Reclaiming Autonomous Food Systems*. London: IIED.

Renting H and Wiskerke H (2010) New emerging roles for public institutions and civil society in the promotion of sustainable local agro-food systems. In: 9th

European IFSA Symposium: Transitions Towards Sustainable Agriculture: From Farmers to Agro-food Systems. Vienna, Austria, 4–7 July 2010: 1902–1912.

Rhodes RAW (2007) Understanding governance: Ten years on. *Organization Studies* 28(8): 1243–1264.

Rosset P (2008) Food sovereignty and the contemporary food crisis. *Development* 51(4): 460–463.

Rosset P (2009) Fixing our global food system: food sovereignty and redistributive land reform. *Monthly Review* 61(3): 114–128.

Rossi A, Bui S and Marsden T (2019) Redefining power relations in agrifood systems. *Journal of Rural Studies* 68: 147–158.

Sadler RC, Gilliland JA and Arku G (2014) Stakeholder and policy maker perception of key issues in food systems planning and policy making. *Journal of Hunger and Environmental Nutrition* 9(1): 1–15.

Santo R and Moragues-Faus A (2019) Towards a trans-local food governance: exploring the transformative capacity of food policy assemblages in the US and UK. *Geoforum* 98: 75–87.

SAPEA (2021) *A Sustainable Food System for the European Union*. DOI: 10.26356/sustainablefood (accessed 15 April 2022).

Sassen S (2013) When territory deborders territoriality. *Territory, Politics, Governance* 1(1): 21–45.

Shaw HJS (2006) Food deserts: towards the development of a classification. *Geografiska Annaler: Series B, Human Geography* 88(2): 231–247.

Shaxson L, Datta A, Tshangela M, et al. (2016) *Understanding the Organisational Context for Evidence-Informed Policy-Making*. London: ODI.

Smit W (2016) Urban governance and urban food systems in Africa: examining the linkages. *Cities* 58: 80–86.

Smith N (1992) Geography, difference and the politics of scale. In: Doherty J, Graham E and Malek MH (eds) *Postmodernism and the Social Sciences*. London: Palgrave Macmillan, 57–79.

Sonnino R (2013) Local foodscapes: place and power in the agri-food system. *Acta Agriculturae Scandinavica, Section B: Soil and Plant Science* 63: 2–7.

Sonnino R, Marsden T and Moragues-Faus A (2016) Relationalities and convergences in food security narratives: towards a place-based approach. *Transactions of the Institute of British Geographers* 41(4): 477–489.

Sonnino R and Milbourne P (2022) Food system transformation: a progressive place-based approach. *Local Environment* 27(7): 915–926.

Sonnino R, Torres CL and Schneider S (2014) Reflexive governance for food security: the example of school feeding in Brazil. *Journal of Rural Studies* 36: 1–12.

Soubry B and Sherren K (2022) "You keep using that word...": disjointed definitions of resilience in food systems adaptation. *Land Use Policy* 114: 105954.

Staeheli L (1994) Empowering political struggle: spaces and scales of resistance. *Political Geography* 13: 387–391.

Stone D (1997) *Policy Paradox: The Art of Political Decision Making*. New York: W. W. Norton.

Swyngedouw E (2004) Globalisation or "glocalisation"? networks, territories and rescaling. *Cambridge Review of International Affairs* 17(1): 25–48.

Tefft J, Jonasova M, Zhang F, et al. (2020) *Urban Food Systems Governance – Current Context and Future Opportunities*. Washington DC: World Bank.

Trauger A (2014) Toward a political geography of food sovereignty: transforming territory, exchange and power in the liberal sovereign state. *The Journal of Peasant Studies* 41(6): 1131–1152.

Treib O, Bähr H and Falkner G (2007) Modes of governance: towards a conceptual clarification. *Journal of European Public Policy* 14(1): 1–20.

van Bers C, Delaney A, Eakin H, et al. (2019) Advancing the research agenda on food systems governance and transformation. *Current Opinion in Environmental Sustainability* 39: 94–102.

Vermeulen SJ, Campbell BM and Ingram J (2012) Climate change and food systems. *Annual Review of Environment and Resources* 37: 195–222.

Warshawsky DN (2016) Civil society and the governance of urban food systems in sub-Saharan Africa. *Geography Compass* 10(7): 293–306.

Watson V and Battersby J (2019) Introduction. In: Watson V and Battersby J (eds) *Urban Food Systems Governance and Poverty in Africa*. Abingdon: Routledge, 1–26.

Webb P, Flynn DJ, Kelly NM, et al. (2021) The transition steps needed to transform our food systems. In: *Global Panel on Agriculture and Food Systems for Nutrition*. Available: https://www.glopan.org/wp-content/uploads/2021/05/FSS_Brief_Food_System_Transformation.pdf (accessed 10 Aug 2022).

Westhoek H, Ingram J, van Berkum S, et al. (2016) *Food Systems and Natural Resources*. Nairobi, Kenya: United Nations Environment Programme.

Williams N (2012) *Government Policy - A Spotter's Guide*. London, UK: Government Digital Services. Available: https://gds.blog.gov.uk/2012/02/03/government-policy-a-spotters-guide/(accessed 01 October 2021).

Wilson AD (2013) Beyond alternative: exploring the potential for autonomous food spaces. *Antipode* 45(3): 719–737.

Wittman H, Desmarais AA and Wiebe N (2010) The origins and potential of food sovereignty. In: Wittman H, Desmarais AA and Wiebe N (eds) *Food Sovereignty: Reconnecting Food, Nature and Community*. Oxford, UK: Pambazuka Press, 1–14.

Zaharia A, Diaconeasa MC, Maehle N, et al. (2021) Developing sustainable food systems in Europe: national policies and stakeholder perspectives in a four-country analysis. *International Journal of Environmental Research and Public Health* 18(14): 7701.

Author biography

Christopher Yap is urban geographer at the Centre for Food Policy, City, University of London, and Research Fellow on the FixOurFood research programme. His research focuses on the intersections between food systems, land, and governance.