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Food system transformation: a progressive place-based approach

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ABSTRACT

Responding to growing calls for research that engages with the complexity of food system transformation, in this paper we focus on place as an “active meso-level mediator” between the multiple tensions and contestations that surround processes of change. Drawing on Massey’s notion of a “progressive sense of place”, we identify, through a critical review of the literature, four main features of this concept that, taken together, have a unique contribution to make to ongoing efforts to conceptualise *and* tackle the interwoven socio-ecological issues that affect the food system, and to position justice at the centre of its transformation. These include: (i) the socio-natural composition of place; (ii) the positive interactions and connections that underpin spatial identity; (iii) the social processes (including power dynamics) that shape everyday spatial practices; and (iv) the flows of ideas, materials, people and resources that cut across space. With special attention given to their interdependence and their implications for the functioning of food systems, these four features provide the basis for the development of an innovative and socio-spatially inclusive place-based framework for food system transformation that integrates ideas of sustainability co-benefits, spatial linkages, social inclusion and sectoral connectivities. This framework, we argue, provides a broader and more critical academic understanding of food system transformation at both the macro- and the micro-levels. It also enables the formulation of legislative frameworks, policies and practices to deliver such transformation.

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Introduction

Food systems are convoluted entanglements of relations. Some of these relations are visible, transparent and reciprocal. Others are hidden, hierarchical and contradictory. It is the latter, more than the former, that have provided a focus for academic debates on food system transformation towards sustainability, which, building on Patterson et al. (2017), we define as a process of radical change in the structural, functional and relational aspects of the food system that leads to more just socio-ecological relationships, patterns of interactions and outcomes. For many academics, at the heart of this change should be a process of democratisation that blurs the boundaries of accountability and power within the food system between the public sector, the private sector and civil society (see, for example, McMichael 2009; Lang, Barling, and Caraher 2009; Coulson and Sonnino 2019).

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By and large, debates on food system transformation have taken place at the global level and in abstract terms. Empirical research on food, by contrast, has remained largely focused on relatively small-scale examples of “alternative” initiatives that aim to re-connect producers and consumers around the values of regard, community-building and an ethic of care (Sage 2003; Slocum 2007; Tregear 2011). Underpinning this research literature is a spatial imaginary that privileges the “local” scale as a discrete, bounded territorial unit within which food system actors forge alliances to escape or resist globalised dynamics that bypass their own socio-economic, environmental and cultural specificities.

Referred to as “the local trap” (Born and Purcell 2006; Kirwan et al. 2013), this tendency to frame the local as the site for political action has been extensively criticised, particularly in relation to its inability to account for the larger socio-political determinants of what is achievable on the ground (Brower 2013). Inherent in this critique is the idea that individual food initiatives cannot address the structural inequalities (particularly in relation to land, labour and capital) that affect the food system, unless they manage to bring together different spheres, domains and scales. As Brown and Purcell (2005, 609) state, these are not “inherent and eternal, but malleable” – in other words, constantly re-configured by “place-making” processes that cut across different scales.

Recent literature on “alternative food networks” (AFNs) has unanimously raised the need to broaden the empirical focus beyond individual and isolated case studies and perform what Rosol (2020, 68) calls a more “comprehensive network analysis” to explore the combined transformative potential of different food initiatives. Behind this scholarship is a recognition that “the contingent and often unstable nature of food systems is a function of the complex of relations between the swarm of actors constituting and mediating these systems” (Sarmiento 2017, 488). These relationships have not yet been fully captured and empirically examined, and a growing number of scholars are attempting to design conceptual frameworks and research approaches that can facilitate a more thorough and deeper engagement with the spatial complexity of food systems (see, amongst others, Bosco and Joassart-Marcelli 2018; Koretskaya and Feola 2020). Lamine, Garcon, and Brunori (2019, 163), for instance, propose a “territorial agrifood systems approach” that aims to trace empirically “the diverse manifestations of the global that reflect in actors’ visions, actions, trajectories, relationships and interdependencies at the territorial scale”.

Although useful to uncover the “horizontal” relations between food system actors, activities and networks, a “territorial” approach *per se* is less suitable to account for the “vertical”, multi-scalar dimension of such relations. As Sarmiento puts it (2017, 488), “if we are to understand, further explore, and facilitate the political potential and broader significance of AFNs, it is necessary to grapple with questions about how AFNs articulate with far-reaching forces and powerful actors”, as well as with, we contend, the complexities of spatial justice. This entails, as Fraser (2008, 2) suggests, engaging with how “justice claims are increasingly mapped on competing geographical scales – as, for example, when claims on behalf of the global poor’ are pitted against the claims of citizens of bounded polities”. In relation to food, a cogent example of these tensions is provided by Dieterle (2015: xv), who argues that:

“it is not clear that locally grown food is always the best choice if one is concerned about issues of global justice. In wealthy nations, those who eschew imported food may very well be harming peasant farmers in developing nations ... [who] depend on exports for their incomes. One could argue that food justice movements in developed nations are thus leaving out, albeit unintentionally, those who are wronged the most by the global food system.”

In this paper, we aim to contribute to debates on food system transformation through a focus on “place” as an “active meso-level mediator” (Sonnino, Marsden, and Moragues-Faus 2016) between the multiple tensions and contestations that surround processes of change. We draw on Massey’s (1991) notion of a “progressive sense of place”, which views place as relational, multi-scalar and

socially produced. Our critical review of the literature identifies four inherent features of this “progressive sense of place” that make it a unique conceptual node to progress the research and policy agenda on food system transformation: (i) the recognition of the co-constitution of society and nature (and, by extension, the different dimensions of sustainability); (ii) an approach to spatial identity as a set of positive interactions and connections; (iii) a focus on the social processes (including power dynamics) that shape everyday spatial practices; and (iv) an emphasis on flows (of ideas, materials, people and resources) that cut across space. Taken together, we suggest that these four features provide the basis for the development of an innovative place-based framework (which we will discuss in the second part of the paper) that provides a broader and more critical academic understanding of food system transformation and enables the formulation of legislative frameworks, policies and practices to deliver such transformation.

Food system transformation: the theoretical relevance of “place”

Both researchers and policy-makers are increasingly positioning the food system at the forefront of the sustainability agenda, recognising the negative implications of its current functioning for human health, society, the economy and the environment. Over recent decades, global population growth and rising levels of wealth have been widely associated with increased consumption of meat, dairy and processed foods (high in trans fats, sugar, salt and chemical additives), which have contributed to a rise in the incidence of chronic diseases (metabolic syndrome, cardio-vascular conditions, diabetes and certain types of cancer) and to unprecedented changes in ecosystems (linked to biodiversity loss, greenhouse gas emissions, pollution and water scarcity) that are threatening human and planetary health (Tilman and Clark 2014; Willett 2019). Widespread calls for measures that enhance access to healthy and sustainable food for all citizens have had little tangible impact, even in the wealthiest countries of the global North. In Europe, for example, there are 33 million people unable to afford a sufficient meal every second day, while consumers who can afford to purchase healthy and sustainable food lack meaningful incentives to do so (GBD 2017 Risk Factor Collaborators, 2018). In this context, policies such as the European Union’s Farm-to-Fork Strategy, launched in 2020, are increasingly advocating for the adoption of a systemic approach to enable a “just” transition towards sustainable food systems that provide sufficient, safe, nutritious and healthy food for all – an objective that is increasingly framed in terms of “food system transformation”.

Debates on food system transformation are largely characterised by an abstract tone. Indeed, the tendency is to focus on the desirable outcomes of transformative processes, rather than on their potential leverage points. In practice, however, enabling a “just transition” within the food system requires not just critical academic thinking but also holistic action “on the ground”. Clearly, there is a need to move beyond the normative approaches of most scholarship and begin to engage empirically with the complexity of how to make the food system more transparent, just and inclusive.

In this paper, we propose an integrated framework that aims to bridge theory and practice surrounding food system transformation. At the heart of this framework is a concept, “place”, which, we argue, has a substantial contribution to make to the development of a multi-actor, inclusive and cross-sectoral approach that connects food system transformation with the practical needs and demands of all citizens (including those from disadvantaged groups).

Broadly speaking, “place” offers a unique theoretical lens to shift the empirical attention away from isolated case studies and, more broadly, from the spatial dualisms traditionally associated with food systems – what we might term the global/conventional – local/alternative divide (Sonnino and Marsden 2006). Far from being an independent and fixed territorial entity with inherent qualities, place needs to be approached as in a constant state of becoming that unfolds through “everyday practices that move across geographic scales, from the body to the global” (Bosco and Joassart-Marcelli 2018, 541). In this sense, place can be thought of as an “active mediator” (Sonnino, Marsden, and Moragues-Faus 2016) that dynamically “gathers” different physical, social and cultural elements (Casey 1996). As Barron, Hartman, and Hagemann (2020, 449) suggest, place’s engagement with diversity

clearly echoes “the need for sustainability to facilitate genuine dialogical encounter across difference” – without prioritising specific ecological, economic or social justice concerns.

The convening power of place should not, however, be taken for granted or left unscrutinised. As human geographers have long argued, place-making processes always entail negotiation and contestation, which means that understandings of place require engagement with issues of power. As Swyngedouw (1997, 169) suggests, place is “the embodiment of and the arena through which social relations of empowerment and disempowerment operate”. As such, it is imperative to anchor transformative strategies in a “progressive sense of place” (Massey 1991) that emphasises “not localness per se, but the rootedness, embeddedness and richness of space” (Koretskaya and Feola 2020, 306). In other words, a progressive sense of place facilitates a “reading for difference” (Gibson-Graham 2008) and the recognition of the dynamic relationships between different places and geographical scales (Rosol 2020, 59). In doing this, the analytic focus shifts from the dominant, ubiquitous and visible (in the case of food systems, fast food outlets and large retailers in food environments, for example) to the alternative, marginal and hidden (such as informal practices of food sharing activities, solidarity purchasing groups and community gardening). With places always being in the process of becoming something different, it is important to stress that marginal/hidden practices are capable of becoming mainstream/visible, triggering wider (systemic) transformations (see Barron, Hartman, and Hagemann 2020).

We argue that a progressive sense of place has a crucial contribution to make to ongoing efforts to conceptualise *and* tackle the interwoven socio-ecological problems that affect the food system. As we explain below, a place-based approach has indeed the capacity to bring together society and nature, to foster positive spatial interactions (including between “the urban” and “the rural”) and to connect and integrate a multiplicity of public goods and knowledges. In the next sections, we will describe these fundamental features of “place” as conceptual building blocks of an innovative and integrated framework that, we will argue, can help to progress food system transformation both theoretically and practically.

Bringing together the social and the natural

As a concept, place incorporates both social actors and nature. A progressive sense of place, in particular, is informed by a non-hierarchical logic of relations between humans and non-humans that is characterised by notions of entanglement and mutual support (Escobar 2019). A progressive sense of place also connects with urban political ecology, which acknowledges the interconnectedness of social, political, economic and environmental forms of injustice that are played out in place (see Heynen, Kaika, and Swyngedouw 2016) as well as how nature has become important to the reconfiguration of spatial regulation and place-based political regimes (Keil and Graham 1998).

When applied to the food system, the lens of “socio-nature” can enhance understanding of the power dynamics that shape it and, at the same time, are shaped by it. Thinking about organic food through socio-nature, for example, helps to approach it not just as a “natural” product but also as a product of human labour, providing an essential bridge between nature and society (Alkon 2013). Research on organics, then, does not confine its focus to the environmental benefits of low-input methods of production; it considers also the wider social context in which organic food is situated. This implies raising questions, for example, about the fairness of working conditions for agricultural labourers as well as about the accessibility of organic products for the poor (Guthman 2004; Alkon 2013). Addressing these questions is vital to uncovering “goals and tactics that have the greatest likelihood of just outcomes” (Schrager 2018, 24) within a global foodscape that rests on the fundamental idea that economic growth can be decoupled from its social and environmental outcomes (Wanner 2014).

Flows and interactions

The idea of place as being in a constant state of becoming promotes a “‘topological’ spatial imagination concerned with tracing points of connection and lines of flow, as opposed to reiterating fixed

surfaces and boundaries” (Whatmore and Thorne 1997, 289). As a “momentary co-existence of trajectories and relations” (Massey 2000, 229), place is bound up with the continual insertion of new elements and the removal of existing ones (Woods et al. 2021). In the food system, the first of these often triggers processes of re-territorialisation – as often happens with the reintroduction of “traditional” products (for an example, see Sonnino 2007). The removal of an existing element from a place, by contrast, tends to initiate processes of de-territorialisation. In the context of the COVID-19 crisis, the loss of migrant labourers from the agricultural fields of southern European countries (due to mobility restrictions) left produce to rot during the harvesting season, threatening the sustainability of place-based food markets.

The fluidity of place is also associated with its interactions with other places (Barron, Hartman, and Hagemann 2020, 458), which raises wider questions about food system geographies. Research on food production has traditionally focused on rural spaces and places, while studies of AFNs have been largely grounded in urban areas. What is becoming increasingly recognised is that attention needs to be given to the linkages between rural and urban places in making sense of the food system, with the boundaries between “the urban” and “the rural” being blurred by, *inter alia*, farmers’ markets in city squares, urban community gardening and high-tech city-based agriculture. Similarly, it is increasingly being acknowledged by those working on food (in)justice that “the scales of spatial justice are not separate and distinct; they interact and interweave in complex patterns” (Soja 2010, 47), with food justice advocates working in particular places and, at the same time, engaging with activists in other places in order to address both local and global forms of food injustice (Coulson and Milbourne, 2021). Again, this points to the need for the development of a more sophisticated spatial approach that is able to capture the complex relations between food, space, place and scale. In the case of food systems, this implies grounding transformation processes in a set of broadened and reconfigured (urban-rural and local-global) spatial linkages – that is, in a more progressive (and trans-local) understanding of spatial identity (Massey 2004). The Milan Urban Food Policy Pact – a protocol, introduced in 2015, that commits signatory city governments to sustainable food system transformation – is a concrete example of an initiative that seeks to develop de-centred assemblages of place-based social movements towards (urban-rural) food systems that are safe, inclusive and diverse (Sonnino, Marsden, and Moragues-Faus 2016).

Pluralism and empowerment

Approaching place as a social construction evokes the spatiality of everyday life (Swyngedouw 1997), with people establishing relationships with place through everyday practices associated with social processes (Agnew 1999). A progressive sense of place focuses attention on the power relations and politics of diverse everyday governance modalities and their uneven consequences for different social groups. A progressive place-based approach, in other words, uncovers the struggles that social processes always entail and uses them as a leverage point to deconstruct dominant (class-based, racial and gendered) narratives of place that often condemn the strategies utilised by disadvantaged groups to cope with their situations. As such, place as a social construction enables “more distributed and networked forms of knowledge that are bi-directional, non-hierarchical and involve more sites and actors” (Koretskaya and Feola 2020, 309).

More practically, by recognising that place is both made and experienced by *all* those who inhabit it, a progressive sense of place returns “power to the people and to their own discretion in decision-making and problem-solving” (DeLind 2010, 278). This kind of focus can offer crucial insights into the potential of changes enacted “at the micro-level of ordinary food practices (e.g. shopping, eating out, disposing of waste) in both the public and the private spheres to bring about larger infrastructural transformations” (Sonnino, Tegoni, and De Cunto 2019, 115), as well as into the ways in which the latter may in turn affect food-related social practices.

Connections between public goods

Individual engagements with place, which occur through people's bodies, emotions and feelings (Agnew 1987), are always relational – that is, “connected to political, economic and cultural processes that can occur in different locations simultaneously” (Bosco and Joassart-Marcelli 2018, 541). In this sense, place is about relationships that develop across space (Castree 2004) – the constant flows of people, knowledge, materials, ideas and resources between places. As Barron, Hartman, and Hagemann (2020, 458) suggest, “broader interactions enrich the place and enact the wider network that sustains each place”. In some ways, it can be argued that the development potential of a place depends on its connections with “translocal assemblages” (McFarlane 2009), such as those associated with transport and communications infrastructure that enable “new capacities for travel, trade, and cultural exchange” (Woods et al. 2021, 7).

When applied to the food system, a progressive place-based approach elicits reflections on the connections (or lack of) between what and how we eat and wider sets of public goods (such as health, wellbeing, the environment and the welfare system) that, like food, are governed at multiple scales. According to Bosco and Joassart-Marcelli (2018, 541), such an approach raises new questions about “how the spatial organisation of our food system might generate uneven environmental burdens, economic inequalities, health disparities”, as well as about the complex relationships between global drivers of change (for example, trade and migration) and the everyday practices through which people feed themselves.

Bridging theory and practice: a progressive place-based approach to food system transformation

The relevance of place is increasingly acknowledged in relation to the operationalisation of sustainability objectives. A place-based approach, it has been said, helps to clarify the interdependency between the different environmental, social and economic aspects of sustainable development (Barron, Hartman, and Hagemann 2020), providing inspiration for “alternative imaginaries of, and practices for, reconstructing local and regional worlds, no matter how produced by ‘the global’ they might also already be” (Jones et al. 2017, 6). Within debates on food system transformation, researchers have highlighted the potentialities of place (as compared, for example, to the locality or the region) to bring to the fore the socio-environmental specificities of food (O'Neill 2014; Lever, Sonnino, and Cheetham 2019). In this sense, place is deemed to be a particularly useful theoretical node for interpreting local experiences in relation to global processes of socio-ecological change and intersectional difference (Sonnino and Coulson 2021). However, the promise of the relational conceptualisation of place “has not been fully realised in its empirical application” (Woods et al. 2021, 2) due to the tendency by researchers to remain tied to a scalar imaginary that presents the “global” and the “local” as separate realms – a tendency that, within food scholarship, translates into persistent arguments about “conventional” versus “alternative” food systems (Lamine, Garcon, and Brunori 2019). Other critics have attributed the failure to develop a place-based approach to sustainability to scalar tensions surrounding nature-society relations. As Robertson (2017, 4) states, “being attached or responsive to place and being ecologically responsive are not necessarily commensurate goals or outcomes”. Indeed, place attachment may signify “roots, security, and sense of place, but it may also, on the other hand, represent imprisonment and narrow-mindedness” (Gustafson 2001, 680). Clearly, the implementation of a progressive place-based approach to sustainable transformations requires the adoption of a normative stance that defines at the outset their desirable outcomes. Building on our review of the place-based literature, we relate such outcomes (or system-level properties) to the interrelated ideas of co-benefits, linkages, inclusion and connectivities (what we term the CLIC framework). We discuss the four elements of this framework in the next section of the paper.

Leveraging on socio-nature to deliver co-benefits

A fundamental characteristic of place, as we have discussed, is its emphasis on the interdependence of nature and society, which broadens the definition of “community” as inclusive of not just humans but also of all other living things (Barron, Hartman, and Hagemann 2020, 452). Theoretically, this perspective has led some researchers to suggest a more-than-human geography as a promising pathway to analyse the relationship between human engagements with nature and contemporary socio-ecological challenges (see, for example, Robertson 2017; Koretskaya and Feola 2020). Addressing such challenges on the ground requires thinking and acting in terms of *co-benefits* – that is, ensuring that activities that realise benefits in one sustainability dimension do not produce damage in other dimensions. Central to the concept of “co-benefits” is the recognition that sustainability strategies that have specific economic, social or environmental goals may impact other parts of a system (or other connected systems) in a positive or negative way, leading respectively to synergies (co-benefits) or trade-offs.

Crucially, the notion of “co-benefits” also helps to uncover the differential socio-ecological impacts that synergies or trade-offs typically have on different communities. In relation to the food system, thinking in terms of co-benefits entails, for example, raising questions about the extent to which technological solutions that aim to increase food production also create development opportunities and equitable access to healthy and sustainable diets for different socio-economic groups. From a co-benefits perspective, food system transformation, like any innovation, needs to be approached as “far more than merely a scientific, commercial, or technological matter, and requires the incorporation of aspects of social justice” (Herrero et al. 2021, 355).

Re-orientating flows and interactions towards more sustainable urban-rural linkages

A progressive sense of place can also add a territorial dimension to the idea of co-benefits, focusing attention on the importance of (re-)establishing or strengthening socio-cultural, economic and environmental *linkages* between places and, more broadly, between “the urban” and “the rural”. In this sense, place provides an important vantage point to address recent calls for a “more-than-urban” political ecology that moves away from the discursive tendency to privilege “the inside, the core, and the center as the spaces that dictate the logic of the outside, the periphery, the margin” (Tzaninis et al. 2021, 232). A progressive sense of place indeed breaks spatial fixes and replaces the relationships of domination that underpin them with hybridity and reciprocity. In the case of food systems, a place-based approach enhances the analytical and political capacity to overcome the urban-rural divide – the artificial and strict demarcation of rural space that was introduced in global North countries after World War Two to ensure that the countryside could continue to produce food for the rapidly expanding urban population. The fluidity of place as “intersections of flows and movements” (Adley 2006, 88; see also Milbourne and Kitchen 2014) brings into focus the networked interdependencies between the city and the countryside; it helps to see “the rural” and “the urban” as intricately related and mutually dependent. Food system transformation then becomes a spatially inclusive process of re-assembling people, resources, activities and relationships within a territorially-hybrid space that embraces both urban and rural places.

In this context, the “city-region” – a “territorially integrated node of a socio-spatial architecture to reconfigure rural-urban linkages” (Sonnino and Coulson 2021, 1044) – regains prominence as a spatial framework to isolate, explore and eventually integrate the competing demands of diverse food system actors and policies. Under a place-based approach, intervening at the city-regional level would entail, for example, prioritising the development of food distribution channels (such as wholesale markets, farmers’ and fish markets, box schemes and Community Supported Agriculture initiatives) that, in addition to enhancing opportunities for positive interactions between food system actors, build on local biodiversity and enhance the availability, accessibility and

affordability of healthy and sustainable food (for example, responsibly-sourced fish and fresh fruit and vegetables) for all citizens, and in particular those from disadvantaged groups.

Socio-spatial inclusion and empowerment

The food system is characterised by highly uneven power relations, which systematically exclude some communities from the benefits of participation in sustainable development initiatives and projects. Theoretically, the prism of place enhances understanding of the factors underpinning, as well as the implications of, exclusionary processes. Indeed, a progressive sense of place orientates attention around the connections between people's everyday lives and the wider power dynamics that are responsible for socio-spatial forms of exclusion.

A progressive sense of place, in particular, facilitates a shift from theory to action-based research. By focusing simultaneously on the social relations of power, on the daily struggles that such relations entail and on their implications for the everyday practices of different groups of citizens, a progressive place-based approach has as its goals improved systems of inclusion and equality. Enhanced participation and local leadership, control and ownership of initiatives are explicitly advocated and supported as means to a fundamental end: community empowerment (see Colleen and Reed 2017). In relation to food, empowerment implies designing (research) projects that actively engage with the food practices of deprived communities and particularly their everyday forms of resistance to the operations of the global/industrial food system.

Under a progressive place-based approach, a crucial leverage point for enabling inclusion and empowerment is knowledge pluralism. As a site of multiple identities and histories (Massey 1991), place helps to deconstruct the dominance of scientific knowledge and, at the same time, to recognise the deeply political nature of sustainability transitions and how these are often framed in ways that are critical of the coping strategies of those living in poverty. An example in relation to food system transformation is the way notions of "nutrition" and "health" are used uncritically to distinguish between "good" and "bad" diets and lifestyles without appropriate recognition being given to the structural forces that shape the everyday food environments and experiences of disadvantaged groups (Alkon 2013).

A progressive sense of place helps to problematise and unpack knowledge (including its nature, production and ownership as well as its ethical and moral framings), turning food system transformation into a process that reconfigures the power dynamics between different groups and recognises and draws upon various forms of knowledge (such as evidence-based, experimental and experiential) and the different values (such as socio-ecological justice and economic competitiveness) that underpin them. It also ensures that technological fixes such as digital or smart farming are available to (and benefit) different types of food producers, thereby reducing dependence on monocultures and supporting other forms of food production (such as organics and agroecology) that aim to enhance ecosystem services.

Connectivities: mobilising the multifunctional potential of the food system

The recognition of these interdependencies introduces the last fundamental element of our place-based framework, that of *connectivities*. This evokes the relational nature of place and its porosity – that is, "its connections to space-society relations that transcend the local" (Bosco and Joassart-Marcelli 2018, 541) or, as Woods et al. (2021, 6) describe it, the "constant movement of people, goods, vehicles, currency, information, animals, viruses, carbon particles, and an array of other entities in, out of, and between places". Moving beyond its spatial form, the notion of connectivities also refers to the relationships between different economic, technological and policy sectors. As Herrero et al. (2021: e59) argue, "innovation in the agri-food system cannot be understood without recognising the influence of wider processes of change relating to, for example, energy,

health, and the deployment of technologies that have pervasive effects across multiple economic and social sectors”.

Building on the “messy” dynamics between environmental, societal, technological and economic systems (Patterson et al. 2017), a place-based approach engages with the rigidities, divides and gaps that have hampered coordinated action for food system transformation – that is, the fragmentation of responsibilities across multiple government departments and agencies, the asymmetries of power between food system actors and the increasing corporate control exercised by agribusiness and transnational companies (Sonnino and Coulson 2021). Engaging with these issues is fundamental to identifying mechanisms that can connect multiple scales and to problematising the evidence-base for food policy-making. The development of city-regional food policy networks may offer promising pathways to connect food system transformation with concerns around climate change, resource scarcity, biodiversity conservation, sustainable transport, affordable housing and employment (Candel 2020). There is also scope here to ensure that such food policy integration leads to more polycentric and plurivocal systems of governance. Indeed, it has been pointed out that there is potential for place-based governance approaches to help us move beyond abstract questions of progressive politics (Schrager 2018, 24) and pursue greater equality in the social relations of power through the deployment of mechanisms that enhance participation by multiple groups within a community (Colleen and Reed 2017, 1107).

Some conclusions: towards a new research and policy agenda on food system transformation

Abstract calls for systemic food change have largely failed to alter the socio-ecological relationships that underpin the food system (Lee Cornea, Veron, and Zimmer 2017). Starting from the assumption that “critique in isolation is insufficient to generate change” (Walker 2006, 392), we have proposed an integrated place-based framework (the CLIC) that is designed to guide the search of new socio-political configurations – or “spaces of possibility” (Gibson-Graham 2006) – that steer food system transformation towards sustainability. In this respect, the CLIC is explicitly a normative framework; it outlines a direction of travel for food sustainability agendas, without overlooking their political (and, hence, potentially highly contested) nature. Indeed, positioning place at the heart of the framework provides the opportunity to hold together dissimilar elements, processes and systems (together with their associated values and narratives).

Practically, the CLIC framework can guide the formulation of policies and legislative frameworks in support of food system transformation by conveying a central message to decision-makers: that achieving a balance between sustainability objectives is a territorially and socially inclusive process, which needs to establish and constantly strengthen reciprocal relations within the food system (that is, between its very diverse communities of stakeholders) but also between the food system and other complex systems (such as energy, water and transport). Under the CLIC framework, for example, municipal policymakers would learn to see the surrounding rural area as an integral part of the urban food system, and, hence, as a space that needs to be nurtured rather than exploited. Planners, on their part, would be encouraged to make use of the instruments at their disposal (land use plans and zoning laws) to design food environments that make sustainable and healthy food more available, affordable and attractive to citizens. For private sector actors, the CLIC framework provides an incentive to develop innovative investment schemes and business models that are based on synergies between food, public health, the environment, the economy and societal well-being.

Place’s active and progressive engagement with diversity has a unique contribution to make also to the development of a new research agenda on food system transformation towards sustainability. As a conceptual node, place brings into focus the coevolutionary interactions between different human and non-human elements, stressing the importance of interdisciplinary research. As Herrero et al. (2021: e56) state, “the task of discovering, adapting and scaling transformational

innovation is as much one for social scientists as it is for natural scientists". Indeed, it is only through the simultaneous application of natural and social science methods that the full spectrum of interconnections that form more-than-human communities can be revealed (Patterson et al. 2017) and, if necessary, acted upon to strengthen the interdependency of the environmental, social and economic objectives of sustainability (that is, their "co-benefits").

Place-based interdisciplinary research is ideally positioned to highlight the complexity of food system transformation as a dynamic and radical process of change that needs to create new "connectivities" between governance scales (from the household to the global), sectors (energy, housing, trade, transport, welfare, public health, etc.) and domains (socio-cultural, institutional, political, economic, ecological and technological). It should be recognised, however, that the interplay between changes at different scales – involving multiple sectors and domains – may produce "new possibilities but also unpredictable outcomes and predictable (but easily overlooked) collateral benefits or damages" (Herrero et al. 2021: e59).

By focusing on the uneven spatial consequences of transformative processes as well as on everyday forms of resistance, place-based research fosters the active and meaningful "inclusion" of a diverse range of groups, experiences and knowledges. As Brawley (2009, 129) argues in relation to ideas of spatial justice, the task is to "cultivate a different figuration of political belonging and human collectivity than that offered by the neoliberal and neoconservative projects; a citizen who not only expects but *practices* democracy as constituted through embodied spatial practices of shared power and collective freedom ...". Interdisciplinarity thus becomes transdisciplinarity; in addition to bringing together different disciplines, with their different epistemologies and methodologies, place-based research in support of food system transformation needs to extend beyond the academy (den Boer et al. 2021). Drawing upon the expertise and embodied experiences of a range of different actors, a place-based approach helps researchers to recognise and build upon the inherent hybridity of the food system to envision new socio-ecological linkages that disrupt persistent (and often exclusionary) global-local and urban-rural divides.

In conclusion, the place-based CLIC framework being proposed in this paper is first and foremost an invitation to develop more critical explorations of, and engagements with, potentially conflicting ideas and agendas that are hampering food system transformation towards sustainability. Its integrated emphasis on co-benefits, linkages, inclusion and connectivities is meant to stimulate the generation of collaborative knowledge that will provide both researchers and policy-makers with a better understanding of the multi-dimensionality of food system transformation. We argue that this is a necessary precondition for the identification of new political openings and the envisaging, development and nurturing of new socio-ecological relations. Expressing this differently, what is being proposed here is the conversion of abstract ideas of food system transformation into a socially meaningful, politically relevant and genuinely democratic project.

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