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The New Geography of Food Security: Exploring the Potential of Urban Food Strategies

Introduction

Debates on food security have historically taken place at two different levels. The "productivist" position that emerged from discussions at the World Food Conference (1974) has constructed the problem as one of national self-sufficiency, especially in developing countries. Over time, and largely as a result of Sen's seminal work (1981) on entitlement and access, productivism has been challenged by an access-based approach that situates food security in the context of poor households' survival strategies.

In recent years, the unfolding of a new geography of food security has been exposing the limitations of extreme macro- (i.e., national) and micro- (i.e., household-level) perspectives. Food insecurity today is increasingly "bimodal", encompassing issues of quantity and quality, under- and over-consumption, in both developed and developing countries. Moreover, at a time when most of the world's population lives in cities, food security has also assumed a strong urban dimension, which raises new issues of physical and financial access to food. Finally, the recent emergence of a "New Food Equation", marked by food price hikes, dwindling natural resources, land grabbing activities, social unrest, and the effects of climate change (Morgan and Sonnino 2010), is bringing onto the global food security agenda a range of often interrelated sustainability concerns (Lang et al. 2009).

Global food dynamics always have context-specific manifestations and impacts. As Marsden and Sonnino (2012, 427) state, food has particular spatial configurative features, since its production and consumption embody essential (and uncontrollable) natural and metabolic processes that depend on the type and amount of resources available. For this reason, "food systems – and their health and wellbeing attributes – inherently interact with (and shape) spaces and places". The bimodal dynamics that are shaping the new global geography of food security are bound to impact upon (and be impacted by) local environmental, socio-cultural and economic contexts in very different ways. It is then not surprising that innovative food policies are emerging at the local level, particularly in industrialized countries, where municipal governments are recasting themselves as food system innovators.

Several academic and non-academic observers have recently documented the emergence of urban food strategies, especially in relation to the new governance mechanisms that they have introduced to bring civil society into the food policy arena (Blay-Palmer 2009; FAO

2011a; Viljoen and Wiskerke 2012). As yet, however, no analysis has been performed to distil the vision behind these efforts to reform the urban foodscape. What are the shared features of the emerging municipal policy discourses on food? Are these narratives signalling a new paradigmatic shift in the interpretation of (and responses to) current food insecurities? More generally: Are we witnessing the emergence of a new localism that is beginning to address the complex dynamics at play through a reconfiguration of the relationships between food system actors, spaces and governance scales?

To begin to answer these questions, the paper examines 15 urban food strategies from Canada, the USA and the UK¹ – countries that are widely considered as pioneers of municipally-led food policies (Mendes 2008; Sonnino 2009a). The sample includes cities of very different sizes where public bodies have produced or commissioned a strategic document that explicitly aims to reconfigure the urban food system. These documents, which always include a vision statement, an action plan and often also a set of indicators that aim to facilitate the monitoring of progress towards the identified goals, have been comparatively analysed in relation to three main discursive elements: the motivations behind cities' perceived need to re-scale food governance; the key concepts and ideas deployed to construct the underlying narrative of the strategies; and the role attributed to re-localization in relation to food security and sustainability concerns. Altogether, such elements provide important insights into the potential of these urban innovations to become a significant counterforce to the complex socio-economic and environmental dynamics that are shaping the new geography of food security. At the same time, as it will be argued in the conclusions, they identify new intervention areas that require more specific attention in the formulation of theoretical and policy agendas for food security.

Reclaiming the local in food security debates: the context

The debate on food security has traditionally been polarized around two main narratives. The first, and oldest, is a "productivist" discourse that emerged from the 1974 World Food Conference, when food security was for the first time conceptualized as an issue of national self-sufficiency or self-reliance — "whether a country can meet its own food needs" (Lang et al. 2009, 255; see also Harsch 1992). Today, the proponents of this approach continue to focus on the supply side of the food chain and on the efficiency of the production process, emphasizing the role of scientific and technological innovation in mitigating food shortages. The central idea is that developed nations need to increase their food production for domestic consumption and to supply developing countries (Dibden et al. 2011; Rosin 2013).

¹ The sample includes Toronto and Vancouver (Canada); New York City, Chicago, Philadelphia, Los Angeles, Oakland and San Francisco (USA); Plymouth, Bristol, London, Newquay, Brighton and Hove, Manchester and Lewisham (UK).

During the 1980s, the persistence of food crises in the global South, coupled with Sen's influential theory on food entitlement and access (1981), began to change the emphasis from the "natural" causes of hunger to its wider political and socio-economic context (Dilley and Boudreaw 2001; Gladwin et al. 2001; Valdivia and Gilles 2001). Over time, this created a shift from an international and national (i.e., macro) policy focus to an emphasis on the individual (i.e., micro) level of poor households, generating the emergence of a "livelihood security" model that has uncovered the complexity of demand strategies employed by vulnerable people² (Maxwell, 1996; Lindenberg 2002; Davies et al. 2001). In current debates, this model has been incorporated into wider access-based approaches that focus on issues of food distribution (Sage 2013) and emphasize the role of traditional knowledge and endogenous development strategies in addressing food insecurity (IAASTAD 2009; Marsden 2013).

An emerging literature is raising the need for a new type of approach that bridges the gap between supply-led and demand-led narratives and between macro- and micro-perspectives on food insecurity (Barling et al. 2008; Sonnino et al. 2014). Central to this argument is the recognition that the unfolding of a new and complex geography is adding new layers of meaning to the very notion of "security" in relation to the food system. Simply put, the concept of food security today evokes a series of interrelated public health, political, socio-economic and ecological crises that threaten human survival and, for this reason, require strong public intervention. For the State, securing appropriate quantities of quality food for all citizens is crucial to reduce the human and financial costs of a constantly worsening public and ecological health crisis and to avoid social unrest.

Four fundamental dimensions of the problem currently shape the rhetoric on food security. First, the "nutrition transition", linked to the global expansion of the Western diet, has given prominence to the qualitative dimension of the concept. Food security is no longer just a problem of "under-consumption" (i.e., "quantity"); it encompasses also problems of overand mal-consumption — or, as Lang (2010, 95) states, "all diet-related ill health, not just hunger". In short, food insecurity is fundamentally a bimodal problem of malnutrition (Ashe and Sonnino 2013) that affects over one quarter of the world's population in both the global North and the developing South. This juxtaposition of hunger and obesity is complicating efforts to design an effective food security agenda. As Shaw (2007, 412) pointed out, "it would be grotesquely perverse if attention to world hunger and food insecurity were to be diverted by a focus on the obesity epidemic. *Both* crises must be overcome".

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² As one reviewer pointed out, feminist scholars played an important role in the development of this "intrahousehold entitlements" framework. In her 1987 book on famine in Malawi, for example, Megan Vaughan strongly criticized the tendency to draw conclusions on the causes of hunger from aggregate data on food supplies and stressed the local variety of experiences and perceptions that are historically associated with famine.

Second, the new geography of food security has also added an important political dimension to the concept. Indeed, the food riots that followed the spike in fuel, food and energy prices of 2008 demonstrated that ensuring that all citizens have access to quality food is not just a moral imperative; it is also a matter of *national* security, as G8 countries acknowledged at their first ever meeting on agri-food issues held in Italy in 2009 (Morgan and Sonnino, 2010).

At the core of the problem here there are new issues of access to nutritionally adequate food. In the past, this fundamental dimension of food security was addressed primarily in physical and spatial terms — as implied, for example, by the concept of "food deserts" (Wrigley 2002). To some extent, this scholarly focus was a reflection of a wider "bias" in food provisioning, which privileged the welfare needs of urban populations to avoid the dangers of social unrest in densely populated areas. As Marsden and Sonnino (2012) recall, the intensive food regime that dominated industrialized countries in the 20th century provided a clear allocation of functions for the city and the countryside, which resulted in a "fundamental separation between rural intensive production systems and mass urban consumption spaces" (2012, 428). The priority was to strictly demarcate agricultural land and enhance production for a growing and increasingly concentrated urban population.

Today, spatial and sectoral policies have become less relevant to address the new geography of food security, which is shaped primarily by problems of financial access to nutritious food. Again, these are especially evident in urban contexts, where most residents are not directly engaged in food production and have to rely on cash to purchase their food (Sonnino 2009a). At a time of recession and financial crisis, shortage of cash is bound to have significant public health implications for the growing number of urban poor. As stated by the General Director of the World Health Organization (Chan 2009), "when money is tight, the first things that drop out of the diet are usually the healthy foods, like fruits, vegetables, and lean sources of protein, which are nearly always more expensive" (see also Mullie et al. 2010)³.

The third fundamental dimension of the new geography of food security is indeed its extreme variation across different socio-economic groups (UN Habitat 2010), which mainstream strategies have thus far been unable to address, especially in urban areas. As FAO (2011b) has recently recognized, "policies and resources dealing with poverty, exclusion and inequalities in cities remain highly inadequate. As a result, urban diets are

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³ Engels' law predicts that a rise in household and national income tends to decrease the proportion of that income spent on food. The new geography of food security is reversing this trend. In the UK, for example, a recent Parliamentary Inquiry into Hunger and Food Poverty revealed that the proportion of household income spent on food increased between 2003 and 2011, mostly as a result of rising food prices (Field, 2014). Predictably, the effects have been especially negative for households in the lowest income group, which are consuming less healthy foods (such as fruit and vegetables) and more processed products (such as bacon and cheese) (see also Social Mobility and Child Poverty Commission 2013).

affected and malnutrition has become a major concern". Social unrest has emerged as a visible manifestation of widening inequalities. As Holt-Gimenez (2008) noted, the food riots that followed the price surge of 2008 exploded not in areas were food was unavailable, "but where available food was too expensive for the poor"—that is, in urban areas.

Fourth, the new geography of food security is increasingly affected by a series of interrelated ecological pressures. So far, academic debates on the interplay between food security and environmental sustainability have mostly focused on climate change – its uneven effects on food productive systems and the responsibility of industrialized nations to alleviate the problem in developing countries. An emerging but still very fragmented literature is beginning to add important details to this debate. In synthesis, it has been argued that global food consumption patterns, linked to the expansion of the "nutrition transition", are decreasing the availability of water, which is widely utilized for irrigation in agriculture and for processing foods (such as meat and dairy products) that form the basis of the Western diet (Collette et al. 2011). At the same time, urbanization is exacerbating the problem of soil degradation (UNEP 2012), especially in developing countries, where the amount of land devoted to food production continues to decrease (Chappel and LaValle 2011). Global food security is further threatened by very high levels of food losses and waste that occur at different stages of the supply chain and that affect as much as one third of the total amount of food that is produced globally. At a time of rising food insecurity, there are clearly new questions that need to be addressed regarding the availability of adequate technologies and infrastructure (see Parfit et al. 2010), as well as global purchasing trends and consumer/retailer habits (UNEP 2012). More generally, as Fish et al. (2013) explain, one fundamental question that lies at the heart of the current debate on food security is whether and how the presumed need to increase production can be reconciled with wider limits to sustainability.

In synthesis, urbanization, a persistent financial crisis, widening socio-economic inequalities and a range of ecological issues that have emerged at all stages of the supply chain are changing the geography of food insecurity. Industrialized and developing countries are today united in a global fight against malnutrition, a problem that is especially evident in cities, where environmental degradation is also mostly concentrated. Clearly, there is a need for a new theoretical and policy agenda that accounts for the "deeply inter-locking nature of economic, social and environmental systems" to promote "more cross-sectoral approaches to decision-making" (Misselhorn et al. 2012, 10). Quoting Lang (2010, 94), "whereas the productionist paradigm assumed that the Earth was limitless, the new era's policies must assume the connections between environment, social justice and health" (see also Garnett 2013, 36). In practice, this entails a shift from the conventional tendency to address single issues problems to the adoption of a systemic perspective that takes into account the interrelatedness of the whole food chain and of the whole food cycle (Lang and Barling 2012, 318).

Urban food strategies provide an excellent starting point for the development of this new agenda. In Canada, the USA and the UK an increasing number of municipal governments have been devising policies that aim to develop more synergistic relationships between food consumers and producers and between urban areas and their surrounding rural hinterland. The phenomenon has been documented by a number of researchers, who have highlighted the transformative potential of these innovations (Sonnino, 2009b; Viljoen and Wiskerke 2010), especially in relation to the new variable spatial, socio-economic and ecological "fixes" that they are attempting to create (Marsden and Sonnino 2012). However, the literature still lacks a critique of these emerging initiatives. A crucial question for theorists to consider is whether urban food strategies are creating a fundamental shift in the food system or if they are merely examples of niches that fail to make a dent in the dominant discourse and practices (Sonnino and Spayde 2014). To begin to address this issue, this paper provides the first comparative analysis of the narratives that frame the new urban food policies. As Nally (2014) has recently argued, discourses on food security are as important as its socio-economic and political dynamics; indeed, through their symbolic power, they "produce a social reality" (Nally 2014, 1).

Two issues deserve attention as a background to this analysis. First, the expression "food security" never features in the titles of urban food strategies⁴. However, it is arguably the main underlying theme of all documents analysed. In some cases, there is a direct reference to the problem of food insecurity in the identification of specific policy objectives. New York City (New York City Council 2010), for instance, devotes an entire section of its food plan to "moving from food system insecurity to opportunity"; Oakland (Unger and Wooten 2006) identifies food security as the first goal of its strategy. In most urban food strategies, however, the emphasis on food security translates into a strong focus on public health and issues of access to nutritious food for all citizens. Food security, in short, is operationalized in relation to its access dimension -- "increasing access to fresh, nutritious, and affordable foods" (Chicago), ensuring "equal access to good food" (Los Angeles), establishing "healthfocused food policies" (Toronto) or "diet-related health objectives" (Newquay), making sure that "everyone has access to healthy, culturally diverse and affordable food" (Vancouver), increasing the health and welfare of citizens "through improved access to nutritious and safe food" (Lewisham), enhancing "access to affordable food for all residents" (Brighton and Hove).

Second, food security is never discussed in isolation. Faced with the emergence of a range of environmental problems that continue to threaten their capacity to provide access to nutritious food for all their residents, city governments invariably embed security into a wider health and sustainability agenda that emerges with clarity in the titles of the

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⁴ This may reflect an effort by urban governments to subsume food security under a wider sustainability agenda that resonates more widely across the policy and civil society communities. As I will explain, urban food strategies make a clear effort to emphasize the connections between food and other sectors and to stress its potential contributions to the achievement of other environmental and socio-economic objectives.

documents analysed (especially those from the UK and Canada). In this respect, urban food strategies echo recent academic arguments by Lang and Barling (2012, 322), for whom "the only food system to be secure is that which is sustainable, and the route to food security is by addressing sustainability".

Rethinking the food system: a comparative analysis of urban food strategies

The earliest examples of urban food strategies go back to 2006, with cities as diverse as London, Lewisham, Leeds, Brighton and Hove (UK) and Oakland (USA) as pioneers. In the following years, the number of cities that launched their own municipal food strategies grew exponentially, especially in the UK, where, between 2007 and 2011, Manchester, Newquay, Plymouth and Bristol all published their own visions for the reform of their urban food system. In North America, the phenomenon is slightly more recent. Following the lead of Oakland and San Francisco (2008), Chicago, New York City, Toronto, Philadelphia, Vancouver and Baltimore launched their strategies between 2009 and 2011. Variously called "plan," "strategy" or "charter", these documents have a similar format: a vision statement, an action plan and, in some cases, a more or less detailed set of indicators that are meant to guide a review of progress towards the stated objectives. The analysis of these documents aimed to distil their shared discursive elements on the food system and was organized around three main questions: What type of foodscape do these documents envision, and why? Does the rescaling of food governance coincide with the emergence of a new localism that aims to reconfigure the relationship between food system actors and spaces? What kind of concrete priorities and measures do city governments identify to deal with the effects of the new geography of food security?

Urban food strategies: the governance context

The first common element that can be identified in the majority of urban food strategies is a pervasive awareness of the unique role that cities can play in facilitating a systemic transformation of the food system. Behind this awareness is the recognition that cities have "a major stake in the way food is produced" (New York City Council 2010, 16), given the "strong connection that exists between food and the urban environment" (Unger and Wooten 2006, 11) as well as the "disconnection" between the city and the productive landscape (Manchester City Council 2007). In a few cases, this narrative is reinforced through reference to the important role that citizen food movements have historically played in engendering positive change (New York City Council 2010, 10) – as demonstrated, for instance, by the role of changing citizen demand in boosting the development of niche food products in Toronto (Public Health Department 2010, 7).

The identification of food as a new policy arena for city governments often inspires ambitious narratives about global leadership. Toronto's strategy makes reference to the

city's long-standing reputation "as a world leader in food thinking and action" (Toronto Public Health Department 2010, 6); New York City aspires to become "a leader in food system's change" (New York City Council 2010, 3); and Los Angeles (Food Policy Task Force 2010, 6) positions itself as a "world leader" in the provision of "healthy, affordable, fair and sustainable food".

Significantly, this awareness of the opportunities created by a rescaling of political action does not translate into an autarkic or defensive approach to food system change. Urban food strategies often make explicit reference to the constraints created by a wider economic context that makes cities "net importers of food" (Manchester City Council 2007), subject to market forces and vulnerable to changing consumer preferences (London Development Agency 2006, 17). To overcome such constraints and recapture power from the conventional system, many of the documents analysed raise the need for changes in the wider governance context. In some cases, the documents include requests for specific forms of intervention, such as a re-orientation of farm subsidies to support the production of healthy food (New York City Council 2010, 3) or, in the case of Philadelphia, the introduction of new regional tax policies to incentivize fresh food production for local markets (DVRPC 2011, 30). In short, cities see themselves as pioneers of a wider food system change – or, as stated in New York City's strategy (New York City Council 2010, 3), "a model of how targeted local action can support large scale improvements".

Re-thinking localization in the context of a holistic approach to sustainability

In general, notions of "freshness" and "healthiness" are central in the narratives of urban food strategies. Significantly, however, they are never discussed in isolation from other sustainability objectives. The city of Toronto (Public Health Department 2010, 6), for example, envisions a "health-focused food system" that "nourishes the environment, protects against climate change, promotes social justice, creates local and diverse economic development, builds community". Likewise, Los Angeles (Food Policy Task Force 2010, 11) uses the notion of "good food" to frame its vision for a food system that "prioritizes the health and wellbeing of our residents [and] makes healthy, high-quality food affordable", while also contributing to enhance the urban environment, create a thriving economy and protect and strengthen regional biodiversity and natural resources. For the city of Bristol (Bristol Food Network 2009, 2), a "sustainable and resilient food economy", which is identified as the main objective of its food strategy, "has an important contribution to make to both environmental and community health". Along these lines, Philadelphia (DVRPC 2011, 4) goes as far as defining "local and healthy food movements" as "economic development strategies".

More generally, what emerges in these documents is a tendency to approach food security in very holistic terms, through the use of a language that makes explicit reference, at the same time, to the economy, society and the environment – the fundamental pillars of sustainable development. Brighton and Hove (Food Partnership 2006, 1) was one of the

earliest cities to stress in its food strategy the relationships that the food system has with "social equity, economic prosperity, environmental sustainability, global fair trade and the health and well being of *all* residents". A similar view is present in Newquay's food strategy (Duchy of Cornwall et al. 2007), which highlights the connections between "food, health, the environment and economic regeneration", and in the Philadelphia's plan, which emphasizes the potential of food in terms of "strengthening the agricultural sector, improving public health, protecting soil and water resources" and, more broadly, "encouraging diversity, innovation and collaboration" (DVRPC 2011).

This holistic interpretation of the benefits produced by a sustainable and secure food system has important repercussions on the conceptualization of re-localization — a strategy that the academic literature has often linked quite closely with sustainability outcomes (Renting et al. 2003; Sonnino 2013). In general, local food tends to be promoted for its economic and environmental benefits — or, as stated by New York City's Council (2010, 4), its potential to create employment opportunities for urban residents and to decrease energy costs. However, by and large cities do not consider re-localization (or, more precisely, the development of urban food production) as an end goal. In general, local food is just a means to an end — i.e., it is embedded in a wider strategy for sustainability. Indeed, most urban food strategies do not define or attempt to delimit their local food system; rather, they *describe* it through the multiple benefits that it is expected to deliver (including global fairtrade, which is explicitly mentioned in both Brighton and Hove's and Bristol's documents).

Brighton and Hove provides an especially illustrative example of this new localism. Whereas in its first food strategy (Brighton and Hove Food Partnership 2006, 7) the English city placed a strong emphasis on a "localised food system" for the environmental benefits that this produces, its most recent document (Brighton and Hove Food Partnership 2012, 28) states:

Our strategy addresses ways in which we can localise our food production and increase consumption of food produced from within a 50-mile radius, but only as *part* of a sustainable food system. The distance travelled by food, whilst significant, is not the only measure of food's environmental impact [...] the energy intensiveness of production and storage are amongst other crucial factors.

Toronto provides another important example of this new tendency to embed localization into a wider sustainability vision. As stated in its food strategy (Toronto Public Health Department 2010, 12):

Sometimes, both the local food movement and its detractors have become absorbed in debates expressing the same compartmentalized thinking that characterizes the dominant food system. [...] The issue is not so much which single food choice is "best", but how can we accelerate progress towards a comprehensive health-focused food system where the goals of affordability, environmental protection,

local farm viability, land use planning and others, can be reconciled. One of the functions of this food strategy project is to promote this kind of dialogue.

The regionalization of the local

A significant implication of this flexible interpretation of re-localization is a broadening up of the notion of "local" well beyond the municipal boundaries. Most urban food strategies recognize the potential of the "local/urban" (as defined in New York City's strategy) to enhance urban food production, and there is widespread support for urban agriculture and community growing schemes in relation to both food security and sustainability objectives. Chicago's Regional Comprehensive Plan (2010, 142), for example, recognizes that "although food miles account for only 11 percent of the food system's greenhouse gas emissions, a reduction of food miles also reduces the impact that rising fuel costs have on food prices".

However, the main focus of the urban food narratives is what New York City Council defines as the "local/regional food system". Significantly, food security concerns are a key driver of this "regionalization of the local". As stated in Los Angeles' food strategy (Los Angeles Food Policy Task Force 2010, 26), "while the benefits of urban agriculture are significant to individuals and neighbourhoods, poverty and hunger [...] exist on such a massive scale that supporting urban agriculture should only be viewed as *a supplement*, *not a replacement*, strategy to solve food insecurity and improve food access". Likewise, Lewisham's strategy (Lewisham Council 2006, 22) states: "local food growing projects [...] are not the only answer to health inequalities [but] they can be part of a wider strategy".

What are then the main attributes of the "local/regional" food system that urban strategies are envisioning? In general, the North American documents make an effort to delineate the boundaries of the regional/local either by referring to the State in which the city is located (as is the case for Vancouver) or, more often, by introducing the notion of "foodshed" – a loosely defined geographical area from which a population's food "may theoretically be sourced" (DVRPC 2011, 4). As stated in San Francisco's food strategy (Thompson et al. 2008, 4), the term "foodshed" is useful to develop "the broadest" definition of local food, one that takes into account not just territoriality, but also a series of quality attributes such as agricultural production methods, fair farm labour practices and animal welfare. Likewise, Los Angeles (Food Policy Task Force 2010) interprets the concept of "foodshed" not just in relation to food production and consumption, but also in association with a range of regional economic, employment, demographic and environmental indicators. As Toronto's food strategy (Toronto Public Health Department 2010, 7) puts it, "the strategic challenge is to build the links within this common foodshed". The foodshed, in short, is an ideal type, a normative goal, an envisioned foodscape in which the city, the countryside and all different actors and stakeholders that occupy their spaces are reconnected -- physically, culturally, environmentally, socially and economically.

Reconnecting food system actors, spaces and policies

The terms "connection" and "reconnection" play a very significant role in the narratives of urban food strategies. The English city of Plymouth (Food Plymouth 2008), for instance, makes reference to the "need to create a more connected city" and "close-knit communities" in its charter's vision statement⁵. Brighton and Hove's strategy (2012) directly links re-localization with "connectivity". Manchester (City Council 2007, 19) is more explicit about the essential features that a "new model for the urban food system" should have:

At present [...] the model is a chain in which food is produced outside the city, brought in, sold, consumed and the waste and packaging disposed of, generally outside the city again. [...] There is considerable scope for [...] creating a closed loop system [that] would attempt to reconnect the city to the food it consumes and reduce the environmental impact of food consumption.

The nature of the connections that urban food strategies aim to achieve becomes evident especially in the discussion of the instruments that municipal governments have at their disposal to realize their goals. In general, there are two main types of policy instruments that city governments emphasize. Many urban food strategies urge planners to consider food and to support access to land not just for agriculture, but also for food manufacturing, storage and distribution. New York City, Philadelphia, Manchester and Newquay all envision a more enabling planning system that reconnects urban, peri-urban and rural areas. London's food strategy (London Development Strategy 2006, 21-22) goes further in its approach to spatial planning, which is emphasized for its capacity to promote (and create connections between) "the development of on-farm processing facilities, the provision of sub-regional food distribution systems, the production of street markets, farmers' markets and specialist markets, the maintenance of the High Street, tackling food 'deserts' and a host of other food-related issues".

The second instrument that urban food strategies aim to deploy during the implementation stage is public procurement. In addition to being praised for its connections with public health, climate change mitigation and regional development (as stated in the strategies produced by Toronto, New York City and Philadelphia), public procurement is, again, extolled for its integrative potential —or, as stated in Bristol's food strategy (Bristol Food Network 2009, 2), its capacity to foster a mutually supportive collaboration between urban communities and the food producers, processors and suppliers located in rural and periurban areas. The city of Toronto (Public Health Department 2010) explicitly defines public procurement as "a tool for rural-urban linkages". In Philadelphia's strategy, sustainable procurement initiatives are considered capable of making even broader connections,

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⁵ The language here evokes the "garden city" (a blending of the benefits of rural and urban life) first envisioned by planner E. Howard at the end of the 19th century. As Carolyn Steel (2008, 301) recalls, the progressive land reform that forms the basis of this ideal has however failed to materialize, turning the garden city into a "utopia for all seasons". Urban food strategies seem to move beyond this utopia by broadening the vision around the linkages between city and countryside, which are not just spatial and physical, but also, as I explain in this section, socio-economic, sectoral and political.

embracing, as they do, "all food system stakeholders, ranging from the private sector to the public sector, from local food advocates to hunger relief organizations, from farmland preservation coordinators to economic development agencies" (DVRPC 2011, 11).

In practical terms, this emphasis on connectivities translates into a strong focus on infrastructural development. New York City Council (2010), for example, aims to leverage its economic power "to support alternative retail outlets like farmers' markets and Community Supported Agriculture" and "to build a permanent wholesale farmers' market to help midsized farmers sell to restaurants, government institutions and grocers". Los Angeles (Food Policy Task Force 2010, 16) envisions the creation of a "Regional Food Hub" "to better coordinate supply from small and mid-sized sustainable producers, encourage more local food processing facilities, develop alternative models for food market development, and offer more Good Food jobs and small food enterprise opportunities [...] to residents of all races, genders, ethnicities, and socio-economic backgrounds". One of the main innovations in terms of infrastructural development is a "transit-oriented planning of fresh food outlets" that the city of Philadelphia promotes (DVRPC 2010, 71) "to maximize multimodal access to fresh food by encouraging grocery stores, healthy corner stores, and outdoor markets at key transit nodes and within transit-oriented development zones". This aspiration is present in New York City's food strategy as well, where it is suggested: "the city should ensure that farmers' markets have adequate, high traffic, and stable space in which to operate" (New York City Council 2010, 22).

Another important dimension of connectivity that emerges from the analysis of urban food strategies is of political nature. Municipal food policy-makers do not intend to operate in isolation. As mentioned earlier, they aim to vertically embed their initiatives to find support at higher governance scales. At the same time, urban food strategies consistently emphasize the importance of horizontal forms of embeddedness – i.e., connecting food with other policies and sectors. Los Angeles (Food Policy Task Force 2010), for example, raises the need for "integrating local food system planning into our region's Climate Action Plans, Regional Transportation Plans and other regional planning documents"; Newquay's food strategy (Duchy of Cornwall et al. 2007, 7-8) argues that the development of "reliable markets for local food growers, fishing communities, processors, caterers and retailers" can make a significant contribution to the objectives of its Sustainability Strategy – namely, limiting the population's greenhouse gas emissions and ecological footprint and enhance regional economic development. Policy connections are emphasized also in Brighton and Hove's first urban food strategy (2006); in its vision, the document identifies as a key objective the development of "an integrated, cross-sectoral approach to food policy, which links initiatives within public health, environmental sustainability, community development, education, agriculture, cultural and economic development, waste management, urban planning/land use and tourism".

This emphasis on policy integration has some significant governance repercussions. Urban food strategies often raise the need for new institutional arrangements that can facilitate coordination during the implementation stage. This is the case, for instance, of Chicago (Metropolitan Area for Planning 2010, 156), which advocates the establishment of a specific non-profit regional food entity that "should be represented by a variety of members (economic, environmental, transport, agricultural, public health, etc.) to analyse and support food policy issues *from a comprehensive perspective* and *coordinate* federal grants and loan programs". Los Angeles (Food Policy Task Force 2010, 28) also suggests the establishment of a "regional food policy council". As stated in New York City's food strategy (New York City Council 2010, 75), this governance mechanism can play an important role in eliciting "non-governmental input on policy changes and institutionalize the work embodied in this report".

Urban food strategies and the new geography of food security: some conclusions

The new geography of food security is creating space for the emergence of a new localism that does not have, in itself, the capacity to address problems that, in many cases, have emerged (and are experienced) at different scales. Nevertheless, there are important theoretical and practical lessons to be drawn from the analysis of these local food strategies, especially in relation to their new vision for a more secure and sustainable food system. As a start, urban food policies do not target a specific and clearly defined territorial context. Rather, they aim to establish a spatial, economic, environmental and social continuum between different actors, interests and even policies. Urban food policy actors, in short, are constructing a "relational" local (Boggs and Rantisi 2003) that current theories on food security and food re-localization are largely unable to address.

This paper has identified the limitations of the food security debate, which has tended to focus mostly on the two ends of the food system, overlooking a range of intermediary actors and activities (e.g., processing, distribution, packaging) that are key for creating, consolidating or constraining the relationships between food producers and consumers. As discussed earlier, this unwarranted polarization of food security discussions has been responsible for the tendency to confine the analysis of the problem to either the macro- or the micro- level, with very little attention for the "meso-level" dynamics that connect (or separate) national policies and households' survival strategies.

The academic literature on food re-localization, on its part, has also largely failed to develop a relational approach to the analysis of the food system. Indeed, thus far much of the theoretical discussion has focused on understanding the "alternativeness" of local food initiatives in relation to the conventional dynamics that have been shaping the global food

system (Allen et al. 2003; Goodman 2004; Sonnino and Marsden 2006). From a methodological perspective, this tendency has resulted in a widespread empirical emphasis on individual case studies and producer initiatives (Ilbery and Kneafesy 2000; Sage 2003; Sonnino 2007), with little consideration for the connections and dis-connections between different alternative food networks and their combined potential for wider regional development.

At a time of increased food insecurity, an exploration of the narratives that shape urban food strategies signals the emergence of a more integrated vision of a local space where urban and rural areas and actors are connected in a web of synergistic relationships. The analysis of the emerging policy discourses reveals that these relationships (their formation and consolidation) represent the real fulcrum for policy action, which targets primarily the nodal points of the food system (e.g., infrastructure and the policy areas where food intersect with other sectors).

Researchers and practitioners have highlighted the transformative potential of this new food politics of place. For some academics, the novel forms of connectivity that, as described earlier, municipal governments are attempting to create across and between urban and rural landscapes are challenging conventional development theories and planning models (Knight and Riggs 2010; Lerner and Eakin 2011). FAO (2011a, 6) has also recently acknowledged that "a new paradigm is emerging for eco-system based, territorial food system planning [that] seeks [...] not to replace the global food supply chains that contribute to food security for many countries but to improve the local management of food systems that are both local and global".

Empirical and longitudinal data will be needed at the implementation stage to understand to what extent urban food strategies can reconfigure the relationships between urban and rural areas and between different food system actors. However, this preliminary analysis of the narratives embedded in recent documents identifies two important empirical contexts that can provide a starting point for re-thinking the relationship between food security, sustainability and re-localization. On the one hand, there is a need for a much tighter focus on food exchange nodes (e.g., farmers' markets, wholesale markets, food hubs) as tangible "connecting devices" of the supply chain. On the other hand, more research is needed on the role of coordination in the food system – an issue that city governments are attempting to address through new governance mechanisms, such as policy councils, that aim to raise the profile of food across multiple policy agendas.

In conclusion, urban food strategies are bringing to the fore the vital role of physical infrastructure and of policy integration for enhancing food security and sustainability. *Connectivities* are beginning to emerge as both intervention sites and analytical lenses to understand and support a new agenda that is striving to foster the multifunctional potential of food in relation to public health, community development, environmental integrity and

sustainable land use – the values that are increasingly implicated by the complex dynamics of the new geography of food security.

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