International Institute of Social Studies

EL FUTURO DE LA ALIMENTACIÓN Y RETOS DE LA AGRICULTURA PARA EL SIGLO XXI:

Debates sobre quién, cómo y con qué implicaciones sociales, económicas y ecológicas alimentará el mundo.

THE FUTURE OF FOOD AND CHALLENGES FOR AGRICULTURE IN THE 21st CENTURY:

Debates about who, how and with what social, economic and ecological implications we will feed the world.

ELIKADURAREN ETORKIZUNA ETA NEKAZARITZAREN ERRONKAK XXI. MENDERAKO:

Mundua nork, nola eta zer-nolako inplikazio sozial, ekonomiko eta ekologikorekin elikatuko duen izango da eztabaidagaia

Bringing the Country into the City? Signals of agrarian citizenship and food sovereignty in the practice of urban agriculture in Brazil and Canada

Evan Bowness and Hannah Wittman

Apirila – Abril – April
24, 25, 26
2017

elikadura21

NAZIOARTEKO HIZKETALDIA
COLOQUIO INTERNACIONAL
INTERNATIONAL COLLOQUIUM

www.elikadura21.eus

Bringing the Country into the City? Signals of agrarian citizenship and food sovereignty in the practice of urban agriculture in Brazil and Canada

Evan Bowness and Hannah Wittman

Draft – comments welcome, please do not cite without permission from the authors.

Abstract

What role(s) do urban actors play in the development of the food sovereignty framework in particular and in food-systems change in general? Urban agriculture, while not a unified social movement in its own right, is a growing social practice surrounded by claims -- including from some movements for food sovereignty -- to increase food security, empower consumers in decision-making about the food system, reclaim urban lands, close nutrient cycle loops and 'reconnect' urban residents to nature. As such, it occupies a rich conceptual space in thinking through mechanisms to repair the "metabolic rift" between town and country, driven by urbanization, capital accumulation and the industrialization of agriculture. Through the development of three case studies of urban agriculture initiatives that deploy the language of food sovereignty in Canada and Brazil, our paper explores if, how and to what extent urban agriculture can "close the rift" by discursively and materially mobilizing the urban into agrarian struggles related to social and ecological justice and food sovereignty.

On one hand, principles, practices and values related to agrarian citizenship are expressed in urban settings, as consumers and urban farmers articulate and re-assert agrarian "identities, knowledges, positions and political struggles" (Roman-Alcalá, 2015) adapt a broadening collective identity of "agrarian citizenship." On the other hand, some urban farming initiatives in North America, as part of growing alternative food movements, have also been widely critiqued for the exclusionary tendencies of "progressive whiteness" (Slocum 2007), diverting energy and resources away from participation in radical peasant struggles. Our interrogation into whether and how the theoretical reach of food sovereignty extends into urban contexts through urban agriculture addresses the following interrelated questions: 1) what processes of urban agriculture radicalize and which ones deradicalize urban actors? 2) among different urban actors, does the practice of urban agriculture maintain conceptual separations of nature/ society, urban/rural, producer/consumer or dissolve those binaries, and to what effect for urban agrarianism? 3) are urban agrarianism and rural agrarian citizenship different identity frames, if so how and what tensions exist between them? and 4) in what ways has urban agrarianism advanced and hindered food sovereignty as a political project? In unpacking the concept of urban agrarianism,

our paper begins to clarify the 'urban food question' within the global struggle for food sovereignty.

The Place of Urban Agriculture in Food Sovereignty

What role(s) do actors involved in urban agriculture play in the development of the food sovereignty framework, in particular, and in food-systems change, in general? This paper starts by situating urban agriculture within the context of the food sovereignty movement, and then within the context of the metabolic rift. We then juxtapose the cross-scalar urban/rural concept of agrarian citizenship with the idea of urban agrarianism as a possible vehicle to articulate urban energy into struggles for food sovereignty.

Rising concerns among academics and policy makers in the global food system have shaped an international discourse of how to "feed the planet" (Godfray et. al., 2010). Opposition to corporate-led industrial production marked by intensive agrochemical use, green and gene revolution technologies with emphasis on productivity and efficiency of scale, has been globally expressed through a discourse of 'food sovereignty,' which emphasizes small-scale agroecological production, and equitable development of local food systems (Wittman, Desmarais and Wiebe 2010 and 2011). Originally a form of social movement resistance to neoliberal globalization, this alternative discourse has mounted pressure on state and international actors calling for radical change. Increasingly featured in grassroots calls for change in Europe, Australia, and less-so in other countries in the Global North, food sovereignty is also becoming institutionalized by states in legislation and formal government policies and programs.

While transnational campaigns for food sovereignty have been driven by a globalized crisis in what might be considered "rural" issues (such as access to land, livelihoods and ecosystem conservation), in 2008 the UN projected the world would become predominantly urban (United Nations, 2008), emphasizing the need to explore the role urban actors play in sustainable and just food systems. Only recently has the focus of food sovereignty scholars and activists turned to the urban context, and an emerging thread in the food sovereignty dialogue concerns the role of urban actors in rural struggles over land and food systems. Phil McMichael (2014) has suggested that "[i]n its 'second generation' phase, [food sovereignty] operates on both rural and urban fronts, separately and together, connecting producers, workers, consumers and various activist organizations" (194-5). Founding member of La Vía Campesina Paul Nicholson, captures this sentiment in asking

> What is motivating people to take on board food sovereignty? It is food insecurity, heating up of the planet, ecological crisis, longer food miles and the need for food quality and local economies. These are citizens' preoccupations, peoples' preoccupations. La Vía Campesina does not own food sovereignty. Food sovereignty was not designed as a concept only for farmers, but for people — this is why we call it peoples' food sovereignty. […] We're talking about identifying allies, developing alliances with many movements of fisher folk, women, environmentalists and consumer associations, finding cohesion, gaining legitimacy, being aware of co-optation processes, the need to strengthen the urban-rural dialogue, to generate alternative technical models. And above all there is the issue of solidarity (Wittman, Desmarais and Wiebe, 2010: 7).

Embedded in the dialogue are fundamental questions about the place of urban actors in food sovereignty. Are urban food consumers a roadblock or an opportunity to the transformation of agrarian systems? How do urbanization, sprawl and issues of urban inequality intersect with food sovereignty? Do food justice movements in the Global North, with their emphasis on food security and access, advance or direct energy away from agrarian struggles? And in the global North and South, what promise might 'urban' food production hold amidst its many claims for improved food security, environmental sustainability and social capital? Edelman and colleagues pose the following questions:

> What do[es] the growing material and strategic importance of urban agriculture mean for the construction of food sovereignty? How can food sovereignty help bridge the land, resource, market and policy struggles of rural and urban producers? (2014: 919).

In this paper, we argue that urban agriculture has the potential to cultivate *urban agrarianisms* – a counterpart to agrarian citizenship in the agri-activism of the food sovereignty movement, a collectivization of rural and urban collective identities in the recognition of and participation in peasant and producer struggles (Wittman, 2009 A and B). Agrarian citizenship, conceptually, can be thought of as 'bringing the country to the city', where symbols of rurality are brought into urban social spaces through activism and agroecological networks to advance claims for food sovereignty. The question is whether and through what processes this translates back through urban participation in regional, national or international food sovereignty movements such the National Farmers' Union in the Canadian context or in social movements such as the MST or other rural agrarian and environmental movements in Brazil. Before we start unpacking urban agrarianism and the relationship between urban agriculture and the food sovereignty movement, the following section briefly reviews the recent literature on urban agriculture, with emphasis on discussions of its political function.

Urban Agriculture's Claims

Urban agriculture, while not a unified social movement in its own right, is a growing social practice surrounded by claims -- including from some movements for food sovereignty -- to increase food security, empower consumers in decision-making about the food system, reclaim urban lands, close nutrient cycle loops and 'reconnect' urban residents to nature. Often combined in the literature with 'peri-urban agriculture' (surrounding urban areas), growing food and raising animals for food in and around cities and towns is a widespread and diverse social practice (Mougeot, 2005). It ranges from home gardening where individual households have private access to raised beds for private consumption to publically-managed community gardens to large scale hydroponic systems for commercial food production, where commercial production is usually referred to as 'urban farming.'

The global food crisis has driven competing perspectives on urban agriculture's role in feeding the world. On one hand, amidst the global trend towards urbanization (United Nations 2008) and declining ratio of food producers to consumers (Satterthwaite, McGranahan & Tacoli 2010), urban agriculture is increasingly touted as part of sustainable food systems[1] and cities (Cockrall-King 2012; Pearson, Pearson & Pearson 2010). However, available urban space imposes serious constraints on the capacity for urban ag to contribute to food security in the global context (Badami & Ramankutty, 2015). In a study estimating global extent of urban agriculture, urban growing space took up 11% and 4.7% of the total irrigated and rain-fed cropland, respectively (Thebo, Drechsel & Lambin, 2014). However, local food production is most limited where the need is greatest, such as densely populated cities in the poorest countries (Martellozzo et al. 2014), although in these areas it contributes more significantly to household incomes (Zezza & Tasciotti, 2010).

In addition to constraints of physical space available within cities to dedicate to food production, a growing literature documents the diverse challenges facing urban agriculture. This includes competition from conventional agriculture (Debolini, Valette, François & Chéry, 2015; Pfeiffer, Silva & Colquhoun, 2014) and other land uses and sprawl (Pribadi & Pauleit, 2015), as well as environmental (Wortman & Lovell, 2013; Sharma, Cheng, & Grewal, 2014) and regulatory issues pertaining to labour, labelling and inspections (Bradshaw, 2013). Despite these challenges and the limitations to scaling up production, agriculture in the urban landscape is often justified by its 'multifunctional' benefits beyond just food production (Pourias, Aubry & Duchemin, 2015; Lovel 2010). These benefits include

[1] It's important to note that urban agriculture is decidedly unable to make any significant impact on grain production, so the majority of academic studies of urban agriculture focus primarily on vegetable and fruit production.

ecosystem services (Lowenstein, Matteson & Minor, 2015; Clarke & Jenerette, 2015; Lee, Lee, & Lee, 2015; Lin, Philpott & Jha, 2015; Lovell & Taylor, 2013), health benefits (Brown & Jameton, 2000; Bellows, Brown & Smit, 2003) and climate change mitigation (Lwasa et al, 2015; Dubbeling & de Zeeuw, 2011).

Despite limitations to productivity and other challenges, urban agriculture has been associated with other positive social and community effects.[2] In a study of urban farmer motivations, Dimitri, Oberholtzer & Pressman (2016) document "social missions" including education, community building and food justice. And urban agriculture is also connected to mobilization around land tenancy issues (Kennedy, 2008; Roman-Alcalá, 2015), or engagement with and occupation of contested spaces in urban environments. A tradition of politically motivated 'guerrilla gardening' (Reynolds, 2009) exists, especially in the US, and is at times a political statement, despite its usually fragmented and individualized approach. Empirically, however, the social impacts of urban agriculture have been hard to capture. Measurement tool kits have been developed (see for example http://fiveboroughfarm.net/impact/), however data accumulating here is meant to justify gardening projects to funders and governments more so than to accrue evidence of specific societal impacts. And as such the indicators (such as number of participants in gardens) are not designed to measure or link urban agriculture to social change.

In particular, the demobilizing potential of urban food activism requires critical attention, following a growing literature revealing the neoliberal underbelly of alternative food movements (see for example Guthman, 2006). Running alongside the purported benefits are criticisms of the role urban agriculture plays in offloading state provision of welfare support onto, often disadvantaged, communities (Weissman, 2014 and 2015; DeLind, 2014; McClintock, 2014). Not only can programs promoting urban agriculture serve to responsibilize urban actors who are already disadvantaged within the food system to "feed themselves," it also presents a number of stalling mechanisms which may bottleneck potential pathways to scale jumping from immediate urban concerns to issues elsewhere the food system.

The way that people direct their energy towards food systems change is important. Some may see buying organic produce and supporting the mainstreaming of the organic sector through the market as a form of ethical consumerism (Johnston, 2008). Others may invest energy into campaigning to save a community garden under threat of urban development (Kennedy, 2008). In "cities of the global north, the very visible garden battles are the exceptions in the politics of gardens, not the rule (Wekerle & Classens, 2015: 1179). And beyond

[2] This applies mostly in wealthy nations, but also see for the transformation in Cuba (Koont, 2011).

that, discourses to save a local garden or farm tell us very little about urban participation in other food systems struggles that more socially distant beyond the urban sphere of experience, such as land grabbing, rural dispossession, or exploitation of migrant farm workers. So alongside the mobilization through urban agriculture comes 'demobilizing tendencies' in urban food movements. Historically this parallels a globally dispersed 'rural exodus' that brought the rural countryside into the city in search of jobs in factories, where the prospects for urban work quelled rural unrest and calls for a fairer distribution of power, wealth and property. Today the process has evolved, we contend, in that food movements, while a key locus for potential food system, are embedded within broader neoliberal structures that limit their radical potential. This linkage, which ties urban agriculture to the history of urbanization and agricultural development, is more clearly visible in historical terms through the lens of Marx's 'metabolic rift.'

The Metabolic Rift: Separation of City and Country

Our approach adopts an urban political ecology frame, in particular in its consideration of the urban expressions, mechanisms and dynamics involved in the co-constitution and reproduction of social relations and environmental problems. First we outline urban political ecology as an emerging perspective and highlight some of its main concepts, narrowing in on a central concept in socio-environmental literature, Marx's 'metabolic rift.' Then, we consider the applicability of the metabolic rift to understanding the practice of urban agriculture. We offer a scale-based critique here and pose the question whether or not this extends beyond urban environments into rural struggles for food sovereignty.

Urban Political Ecology

Swyngedouw coined the term Urban Political Ecology in 1996 (Heynen 2013). It's based on political ecology, a perspective that studies the political economy of environmental problems. Political ecology's main task has been to bring ecology into critical analysis of social and political processes in understanding the links between power imbalances and the commodification, transformation and consumption of natural ecologies and resources. After brining the 'environment' into critical political analysis, a distinct strand of political ecology scholars sought to bring the urban context into the dialogue. This was based on some conceptual blind spots in socio-environmental scholarship. Urban Political Ecological scholarship problematized the distinction between nature and society in early environmental sociological work, pointing instead to how nature and society are both socially produced. There is no 'nature' untouched by social activity, and all of society is made up out of socio-ecological transformations. For this reason, the concept of hybridity is often invoked to focus on the relations between social and

ecological processes (Zimmer 2010; Heynen et al 2006). This split between nature and society mirrors a boundary line separating the city from country, where the conceptualization of metabolic relations between different scales of capitalist production, and the corresponding interests, powers and control structures, shape landscapes for the extraction and transformation of resources that make urban, and rural, life possible. This distinction between "urban" and "rural" spaces, both physical and social, therefore has historical origins in the development of agricultural relations that emerged alongside processes of industrialization, urbanization and the concentration of wealth and capitalist production in cities and towns.

Hence in urban political ecological scholarship, there's a recognition of a co-constitution between these conceptually distinct places—the relational bounding of urban and rural together as metabolism, where the urban feeds on the rural, positioning them in unequal positions. Urban political ecology as a framework then recognizes the impact that this historical distinction has and continues to have, the economic causes of it, as well as looks to processes to reconnect the the two. This analytic frame is most clearly evident in the heavy influence of Marxist political economy and the notion of a Metabolic Rift, which appears in Marx's third volume of capital where he identified an open loop in that nutrients were being drawn out of the soil as crops grew and were ending up in urban sewage systems rather than being cycled back into the soil (Marx, 1967). He pointed to how capitalism drove urbanization and the industrialization of agriculture, causing both soil depletion and urban pollution. Successive transformations in spatial and economic organization have driven an ever widening rift. From the enclosure of the commons, to the urbanization and prolitarianization of the peasantry, the story captured by the concept of the metabolic rift is one where nature becomes transformed, with negative consequences, for the benefit of a swelling geographically concentrated population. This means that increasingly, food needs to be brought in from surrounding productive landscapes. A space grew between where food comes from and where it ends up, with the economic and political drivers of agricultural activity and urban consumption on one side and agricultural activity and its impacts on the other. This space can be thought of in terms of "distance" between where food comes from and where it ends up, along with an increased efficiency in maintaining, through abstraction of commodification and financialization of food markets, that distance to hide the externalities behind getting food into consumers' shopping carts (Clapp, 2014).

As Schneider and McMichael (2010) argue, the ecological dimension of this rift is more complex than what Marx had presented, noting the complexity of soil health cannot be boiled down to nutrient content. But not only is this rift an ecological one, it's also a social one, recognizing that the embodied practice of ecological production was left behind during urban migration. Alienation from the land has implied a crisis not only of ecology but also of knowledge, and as generations of

urban workers are increasingly distanced from the land, from the once commonly held ‘food literacy’ to produce and prepare food, and from participation in agricultural governance, an epistemic rift has opened separating “the experience and knowledge of human/nature relations (or the practice of agro-ecology) from the conditions of social life under capitalism” (Schneider & McMichael, 2010: 480-1). This separation between town and country has intensified into today as the world continues to urbanize and as agriculture continues to industrialize (Reardon, Bereuter and Glickman, 2016).

Urban Agriculture and Closing the Rift?

We follow Tornaghi 2014’s call for a

> critical approach which puts UA initiatives in the context of specific sociopolitical (and food) regimes, and investigates the role that they play in the reproduction of capitalism, in the transformation of urban metabolic processes, and in the discursive, political and physical production of new socio-environmental conditions (553)

As a practice that straddles the conceptual space of urban consumption and rural production, the two spaces of activity divided by the metabolic rift, what role might urban agriculture play in closing or repairing it? Nathan McClintock suggested that there are three forms of rift implied in metabolic rift theory, and that urban agriculture works to close them all (2010). Urban agriculture, if highly productive, can help close the ecological rift by lessoning the extraction of nutrients from rural soils and even cycling nutrients back and healing the soil through humanure capture in urban productive spaces. He also suggests that urban agriculture historically arises to lessen the negative impacts of unbridled markets, and therefore is a response to the unfolding of primitive accumulation, the commodification of land, labour and food. Urban poverty in some instances can be dampened through subsistence urban agriculture or through supplementing diets with food grown at home. And finally, these processes of commodification of land and food and generations of urbanization is experienced on an individual level in the form of alienation from the process of producing food, so in the global north where food production isn’t necessarily the end goal of urban agriculture, it does serve to ‘reconnect urban folks to nature and to agricultural experiences of labour and subsistence production.

While urban agriculture provides an opportunity for dealienation and protection against enclosure and market forces, the actual potential for decommodification of nature and land through urban agriculture is limited in both the Global North and South. In urban environments with highly valued property, land interests are

powerful and drive towards economic growth (Harvey & Molloch, 2007), so any attempt to transform property relations in urban environments with strong will be met with strong resistance from the state and capital. In poorer areas, there might be more opportunity here, wherein the Global North this is expressed in the form of food justice activism and guerilla gardening, activities that operate in interstitial social spaces. However, in urban areas in the South, arguably where decommodification might make the biggest impact in suturing the social rift, there isn't enough space to challenge existing economic relations at a meaningful scale (Badami & Ramankutty, 2015). That being said, an established scholarship points to urban spaces as both epicenters of capital accumulation on one hand and the pivotal points for the formation of revolutionary politics and movements (Castells 1983; Harvey, 2009). Does urban agriculture play a role here?

The Urban Food Sovereignty Question: From Agrarian Citizenship to Urban Agrarianism?

Urban agriculture may factor into closing the gap between urban and rural as a form of agrarian citizenship (Wittman, 2009 A and B). La Vía Campesina, the transnational peasant organization, bridges urban and rural subjectivities through practices of agroecology and the creation of alternative market relations (2009B). The food sovereignty movement is an example of reframing of who has the right to make decisions and exert power over a territory. In challenging power institutions, such as the state, and large corporate interest, food sovereignty movements carries a radicalization of a new political subject: the collective agrarian citizen. In this way, food sovereignty engages with and expands horizon of citizenship. While citizenship, as a political concept, is often evoked in its Westphalian, nation-state centred form, referring of the conferring of rights and imposing obligations within a social contract (the 'Marshallian' conceptualization of citizenship), agrarian citizenship describes an alternative basis for political participation in transnational movements for food sovereignty. It's the collective subjectivity for a globalizing social movement, what gives food sovereignty a voice calling for the transformation of food system, entailing both an advocacy for peasant access to productive resources and the transition towards more sustainable agriculture through agroecology.

Food sovereignty as a social movement seeks to address food-related struggles, which originally were focused on rural spaces in geographic terms fought with, by and on behalf of rural people. That being said the movement is multi-scale in origin and impetus (Bowness & Desmarais, 2016; Iles & De Witt, 2015). This is to say that the discourse of food sovereignty emerged in the 1990s as rural and urban folks in both the global South and North came together in articulating a vision to challenge state policies and corporate power in the political economy of food. Now the discourse of food sovereignty has spread to urban environments as

well (Block et al. 2011; Laidlaw & Magee, 2015; Davila & Dyball, 2015). Some issues arising in urban discussion of food sovereignty include access to ecologically and locally produced food that respects the rights of indigenous peoples, the notion of a commons and the right to produce food in urban spaces and make a fair wage. There is a resonance here, expressed in the urban context, to what have been characteristically constructed as 'rural' food sovereignty struggles: Struggles over access land, over environmental conditions, over state regulations, and market constrictions. We name these affinities and social processes of alignment *urban agrarianism*.

Urban Agrarianism: From Food Literacy to Food Citizenship

Food sovereignty movements, such as La Vía Campesina and the MST in Brazil, call on urban peoples for acts of solidarity in relation to agrarian struggles, seeking supporters for demonstrations, declarations, land occupations and policy proposals. Urban agriculture may connect, through a dialectical relationship, the city and country to help support this pathway, where the "city goes to the country" in experiencing 'rural' conditions within city limits conceptually and then, physically by getting involved in social movements and policy mobilization. In this sense, food production in and around cities and towns might stimulate agrarianism which in turn can feed into agrarian citizenship.

Agrarianism is a discourse that valorizes self-sufficiency, reliance and simplicity (Carlisle, 2013). A 'new' agrarianism today is evident in places such as British Columbia in Canada where social groups such as the Young Agrarians endorse farmland protection measures that stifle unbridled economic development and urban sprawl as well as provide support for community-based forms of farmland management that enables younger generations of farmers to secure tenure amidst increasing land values (Wittman, Dennis & Pritchard 2017). The new agrarians also carry out a mandate in finding and supporting emerging farmers living in cities who are looking to earn a livelihood in socially and ecologically responsible agriculture by participating in land access struggles. This drawing of urban energy out into rural spaces while simultaneously transitioning industrial agriculture to organic or low-impact farming and protecting farmland is part of a rural transition is one rural-urban confluence in the struggle for food sovereignty.

As urban spaces are a focal point for social change and the myriad of rural issues amidst increasing urbanization, urban agrarianism, or the urban prioritization of concerns for food producers in the countryside, is also needed to support food sovereignty. Based on the idea of 'transformative food activism' (Levkoe, 2011), urban agrarianism kindles a conceptual ethic of care for land in the urban consciousness, expanding the space of engagement with the food system beyond urban spaces of consumption and to critique the local focus of much of contemporary food movements. In this sense, in an ideal form urban agrarianism

is a cultural diffusion, and urban ideology. Urban agrarianism develops through and with food literacy, food-system/critical food literacy and food citizenship.

Food Literacy

Wendell Berry famously lamented the “industrial eater […] who does not know that eating is an agricultural act, who no longer knows or imagines the connections between eating and the land, and who is therefore necessarily passive and uncritical—in short, a victim” (1992: 375). This characterization is of the food illiterate. Starting from the perspective of individuals, the desire to change the food system starts with understanding food and developing a relationship with it, with knowing what we eat. This understanding, knowledge of and connection to food is variously described as ‘food literacy.’ Emerging from the robust literature on health literacy, food literacy, food literacy has been defined as a “collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare and eat food to meet needs and determine intake” (Vidgen & Gallegos, 2014: 54). Food literacy in this sense refers to practical knowledge associated with the biological necessity of eating for healthy development and the prevention of disease.

Knowledge about consuming foods isn’t limited in focus to nutrition. Food literacy also exists within a context of cultural norms (Fieldhouse 1995). How food is prepared is cultural, as is what foods are available and when and how they should/can be eaten, and the meanings imbued in them. Food means more than just nutrition, it’s a social practice and some definitions of food literacy take that into consideration. There also the practical skills associated with being able to produce food, to grow edible plants and to raise animals for food. Food production is also a set of ‘inter-related knowledge, skills and behaviours’ which individuals can have more or less of in a given production context.

Food-System Literacy and Critical Food Literacy

Food literacy as defined above refers to a fairly limited spectrum of activity: the purchasing and handling of food items for consumption. While this base connection to food is arguably essential to being a committed participant in the movement to build a different foods system, other definitions broaden the scope to knowledge about the food system to include the production, processing, distribution or waste management. “Food system literacy” involves developing knowledge at at least three different scales: the biological and physical properties, social relations and global supply chains (Widener & Karides 2014). And so questions beyond personal health impacts can broaden the scope in

understanding the broader implications of food. In a qualitative exploration of knowledge sharing within the food movement in South Florida, Yamashita and Robinson (2014) identified three sensitive issues: GMOs, climate change and farmworker justice. And so food system literacy, as defined here, emerges from engaging with questions such as: What are the impacts for the farmers who produced it? What role does genetic modification and new agricultural technologies play in food security and ecological stability? How does agricultural production affect the climate, locally and globally?

Implicit in critical food literacy is a recognition of the social inequities in the food system, which is more prominent in the definition offered by Yamashita & Robinson (2016), who define critical food literacy as

> the ability to examine one's assumptions, grapple with multiple perspectives and values that under lie the food system, understand the larger sociopolitical contexts that shape the food system, and take action toward creating just, sustainable food systems (269)

Ehlert & Voßemer (2015) argue for taking an actor-oriented approach to conceptualizing food sovereignty, where each actor's life-world is a space in which food-system challenges manifest through micro negotiations with others, policies, institutions and ecological conditions. Taking this approach considers individual people (for example, urban farmers, consumers, activists and policy actors) as key actors in food sovereignty and takes into account their lived realities in their day-to-day experiences as well as their activities in the various institutional roles they play. But it's also important to consider collective actors as well (institutions, organizations), such as non-profits, branches of government, farms and educational institutions.

Does urban agriculture hold potential for repairing the metabolic rift, bringing the city to the country by fostering urban agrarianism? Does urban agriculture grow critical food or food-systems literacy which in turn feeds agrarian citizenship? Our interrogation into whether and how the theoretical and practical reach of food sovereignty extends into urban contexts through urban agriculture addresses the following interrelated questions:

1) <u>are urban agrarianism and rural agrarian citizenship different identity frames,</u> if so how and what tensions exist between them?
2) what processes of urban agriculture <u>radicalize and which ones deradicalize</u> urban actors?

3) among different urban actors, does the practice of urban agriculture maintain conceptual separations of nature/society, urban/rural, producer/consumer or dissolve those binaries, and to what effect for urban agrarianism?
4) in what ways has urban agrarianism advanced and hindered food sovereignty as a political project?

In unpacking the concept of urban agrarianism, our paper begins to clarify the 'urban question' within the global struggle for food sovereignty.

Case Study Development

Through the development of case studies of urban agriculture initiatives that deploy the language of food sovereignty in Canada and Brazil, our project is exploring if, how and to what extent urban agriculture can "close the rift" by discursively and materially mobilizing the urban into agrarian struggles related to social and ecological justice and food sovereignty. These case studies are preliminary/pilot cases. These observations are drawn from the past two years of formal and informal participant observation, interviews and focus groups in Winnipeg Vancouver, and Florianopolis.

The South Osborne Permaculture Commons in Winnipeg, MB, is a network of educational and productive garden spaces, programs and events. The Commons involves a variety actors and institutions, but two in particular have emerged as taking on a management role: Sustainable South Osborne (SSO) and the South Osborne Permaculture Workers' Cooperative. SSO has the mandate of 'fostering a culture of sustainability and resilience in the neighbourhood' (www.SouthOsborneCommons.com). The group started in 2009, in the first few years, the fairly modest initiative amounted to gardening programs, a local food buying club and a few fundraising events and local markets. In 2012 they underwent a broadening of mandate along with a name change and broader mandate to foster a "culture of sustainability and resilience in the neighbourhood" through education and community-based urban agriculture.

While SSO hosts a few smaller events during Winnipeg's long winter when the gardens are not in operation, most of their work happens during the growing season. SSO's primary responsibility in managing the Commons is securing access to space and finding and allocating resources to develop agriculture sites (in particular, in finding grant funding). They also coordinate fundraising efforts, such as the perennial South Osborne Harvest Dinner which feeds 175 community members a meal both served and grown in the community orchard hosted by a few popular local restaurants.

The garden sites sit on publically-owned land (most often, City of Winnipeg park space). SSO enters agreements – sometimes formal, sometimes informal – with groups and individuals who share a stake in the land, and then uses the space to host educational 'Garden Clubs,' and to grow produce either to donate to local organizations who support lower-income folks or for sale. When new spaces need to be developed, part of the expansion work is done by volunteers in the community, and other parts are done through a community-based applied course offered through the University of Manitoba's Department of Sociology called 'Building a Commons.'

In 2015 the expansion of existing sites became too much of a heavy burden to manage by volunteer and student involvement alone. SSO developed an urban farming social enterprise, the South Osborne Permaculture Workers' Cooperative (SOPWC), who would be responsible for managing the food production and garden clubs at the sites. Members of the co-op, deemed 'Garden Stewards,' would take on the role of designing new spaces, overseeing their construction, managing existing gardens, hosting the Garden Clubs, distributing food to participants and social justice agencies, and selling produce to pay their wages. This last part is key, as a major part of the SOPWC's mission is to make urban farming a viable career. The worker co-op also follows permaculture principles to the extent that they can, focusing on soil building and growing techniques that, as much as possible, grow both healthy food and landscapes.

In-depth-interviews with the participants in the Commons (n = 6) and two focus groups (n=12) during this pilot research also indicated that the group is mixed with respect of seeing themselves as advancing food sovereignty. Some in the group saw accessing public land for educational and social entrepreneurial goals as a form of 'sovereignty' in the face of constraint by external pressures, such as municipal regulation. Although generally the frame employed by those in the Commons more closely aligned with the idea of education and sharing space rather than controlling access to it and reclaiming productive resources.

Vancouver Urban Farming Society and Farm Folk City Folk

Vancouver, BC, has recently become something of a hotspot for eco-initiatives, especially since 2010 when the municipal government committing to being the world's Greenest City by 2020 (Valley and Wittman, 2016). Among the plans for realizing this goal is the city's food strategy, with a strong emphasis on urban agriculture. The same year that the mayor declared this ambitious goal, the Vancouver Urban Farming Society was formed as:

> a network of urban farmers that aims to advance urban farming in Vancouver through public outreach and policy development. The society has a close relationship with the Vancouver Food Policy Council and often collaborates with City staff for educational urban farm tours, policy consultation, and outreach to demonstrate and promote policy related initiatives (86).

Urban agriculture organizations in Vancouver 'go beyond' food production in that their motivations are diverse and range from improving food literacy among participants to promoting social justice and community food security. An organization in the BC context that links urban and rural spaces through agricultural practice is the non-profit Farm Folk City Folk (FFCF), a group that

> works to cultivate a local, sustainable food system. Our projects provide access to & protection of foodlands; support local growers and producers; and engage communities in the celebration of local food (FFCF 2016)

Through an arrangement between FFCF and the Land Conservancy of BC, a land trust, FFCF manages the 'Community Farms Network' which:

1. Support the advancement of models of "shared farming on shared land" and alternative land ownership
2. To contribute to the protection of working agricultural and food-producing lands,
3. To support farmland access for new farmers

To advance sustainable, community-led and socially embedded models of farmland ownership, access, governance and production in BC, the CFP supports linking farmers with urban supporters, through the creation of farmer-to-farmer and farmer- to- consumer support opportunities, and through hosting an annual roundtable for community farmers (FFCF, 2014). FFCF boasts among its projects a microloan program with no-interest loans available to producers, a seed security program to "maintain and expand" plant diversity, a local food hub that serves as an online market place and central delivery site for a network of farmers near metro Vancouver to commercial buyers, a diverse event series and a network of 'Young Agrarians' who support youth and farming in BC.

Florianopolis, Brazil

note for draft: This third case study context in Brazil is in the early stages of development…

As one of the first federal governments to enshrine food sovereignty in its constitution, Brazil has an extensive national food strategy implemented at the state level through Food and Nutritional Security Councils (or CONSEA). The CONSEA in Santa Catarina, a relatively economically well-off region in the South East, has established a working group on Urban Agriculture that is rapidly advancing innovative policy suggestions for increasing the viability and scope of urban agriculture in the region. CEPAGRO (Centro de Estudos e Promoção da Agricultura de Grupo, or the Centre for the Study and Promotion of Group Agriculture), a non-profit organization affiliated with the state university. CEPAGRO's organizational tagline translated means "agroecology for the health of mankind [sic], earth and in the city." In addition to playing a key role in the working group on urban agriculture, CEPAGRO also coordinates a city urban composting program called the "Revolução dos Baldinhos" of the 'revolution of buckets.']

Agrarian Citizenship in Urban Contexts

Food sovereignty struggles in urban and rural areas can share the same fundamental principle of changing social relations around food, rooted on the principles of democratic empowerment, ecological sustainability and social equity. Agrarian citizenship is a shared identity frame and political subjectivity taken up by diverse social movement actors fighting for food sovereignty in rural areas. Momentum in the food sovereignty movement, however, depends on widespread urban participation keeping pace with urbanization and the progression of interlinked challenges for food production. Agrarian citizenship spans urban and rural, with movement participants situated in and across both scales. Urban agrarianism, on the other hand, exists as a cultural ideology or movement in urban environments. This makes them separate yet overlapping identity frames, related in that urban agrarianisms can bring urban energy into agrarian citizenship, raising food issues in urban environments where decision-making and social movement power primarily resides.

Some urban agriculturists consider their practice a form of food *activism* (Counihan & Siniscalchi, 2013). In an oft quoted definition, permaculturalists call their practice "revolution disguised as gardening," the term 'guerilla gardening' evokes images of social rebellion and civil unrest, and in typology of urban agriculture, McClinktock (2014) includes a "radical" variant that expresses ideals

such as the 'right to the city' and 'food justice.' However, in the case studies examined here, the degree to which urban agriculture has yet produced substantial social change is negligible, although there are some reasons to see potential in the form of social movement mobilization. While definitions of social movements differ, most agree on the centrality of an intended political outcome pursued outside of the realm of the political system, and so the framing of a social problem is central to a social movement. A collective action frame is a set of discursive resources that define the intended change, helping participants know what is at issue and how to bring about a better world. The frame designates a collective actor, an agent of change, and serves as a call to action to mobilize for it. In the cases examined here, urban agriculture provides a means of a frame construction to connect urban and rural sturggles.

An additional two ideas drawn from sociological literature useful here to conceptualizing urban agrarianism: identity in social movement participation and social networks. One outcome of framing is the creation of categories of belief and belonging, social groupings of 'we' and 'them.' The construction of a shared definition of the problem and outlining possible avenues for collective action creates this separation and simultaneously the creation of a collective subject. This can unify an aggregate around a shared sense of participation, obligation or injustice. A large strand of social movement concepts and studies focus on this element of collective identity – its formation and management and how identity can be a driving force for political change (Polletta & Jasper, 2001; Simon & Klandermans, 2001). Aside from the subjective elements of social movements, in objective terms they refer to patterns of relationships between actors, both individual and collective engaged in change-making. A social movement then can be thought of as a relatively stable set of connections, or interactions between those which the frame is advanced by and for, while at the same time being a connection with a process of struggle against some opposing force or state.

Urban agriculture can link to movements for change affecting extra-urban spaces in that principles, practices and values related to agrarian citizenship are expressed in urban settings: as consumers and urban farmers articulate and re-assert agrarian "identities, knowledges, positions and political struggles" (Roman-Alcalá, 2015). For instance, the identity of an 'urban farmer' places a sense of stewardship of the land in the urban context of complex land use relations, restrictions and tensions. Participants in an urban agriculture network or community garden may also develop a shared identity as a collective. For instance, formal membership in an organization, or even informal ties to a group of gardeners can provide a sense of belonging and connection through social relations to base definitions of problems and proposals for social change. Further, urban farming identities also incorporate the role of food systems educator, where they often "seek to demonstrate that environmentally and socially responsible food production is possible" (Valley & Wittman, 2016: 56).

It's becoming increasingly recognized, for instance, that land access is a major issue for urban agriculture (Wekerle & Classens 2015). There are affinities in the experiences of hardship of urban farmers, gardeners and activists and those of rural producers, although the intensity may be quite different. While the exclusion from access to land for peasant producers can be life threatening, urban access in the Global North is more likely to result in a loss of income or community space. The struggle for land and access to resources, or struggles against the state can share a resonance between urban and rural farms. The struggle for land sovereignty (Roman-Alcalá, 2015) might align a collective identity urban agriculturists and farmers who access agricultural land in the face of farm conglomeration and rising land values.

And so with FFCF and the Community Farms Program in BC there is a deliberate connection linking urban producers to rural spaces in an organized effort to address the issue of land tenure security for farmers. While not always, implicit here is an assumption that urban agriculture can feed into the stream from city to farm by supporting food, or agricultural, literacy. Urban agriculture organizations also can serve as networking hubs that link across to other organizations – formal and informal, interstitial and symbiotic (to use Wright's terminology, 2010), state and non-state. Such organizations may serve as a bridge between rural and urban in their connection to urban agricultural organizations may serve as a portal for urban mobilization. In Manitoba, the Harvest Moon Society for instance is a non-profit organization in the south-western part of the province based out of the small rural municipality (population < 100). They can also serve as members on food policy councils forming a link between urban agriculture as a practice and policy decisions about the food system. The organization hosts an annual music festival, is the home to a learning centre and permaculture demonstration garden in the local elementary school which when closed the municipality sold to the HMS, and a food buying club for a network of 16 direct marketing small-farms in the region. Two university courses bring students out to Clearwater to connect with food production and rural struggles through the Harvest Moon Society: Living in Rural Environments and Communities and Building a Commons, which connects SSO to Rural Manitoba.

Urban Agrarianism's Binaries

An urban political ecological approach to the study of urban agriculture raises some questions: does urban agriculture maintain conceptual separations of nature/society, urban/rural, producer/consumer or dissolve those binaries, and to what effect for urban agrarianism? Based on their ethnographic field work in the North Eastern United States, Mincyte and Dobernig (2016) suggest that urban agriculture reduces social distance caused by the metabolic rift through 'experiential production,' "reconnecting participants to nature" and

decommodfying agricultural labour through simulations of farm conditions for volunteers. The physical space of a garden site itself blurs the division between nature and society in that natural inputs (the sun, precipitation) as well as natural processes shaped by people (such as composting and seed starting), make the distinction between nature and society less clear to participants. This becomes even more pronounced in peri-urban agriculture sites, or rural community garden sites such as the Harvest Moon Learning Centre in Clearwater MB, in 'urban' environments surrounded more closely by open green and agricultural spaces or rurality. Recognition of a farm's dependence on biological processes, soil health and a stable climate embeds human activity within a broader economy of nature. But at the same time, the appeal of urban agriculture provides an opportunity to 'reconnect' to nature, thereby reinforcing the separation between nature and society in suggesting that nature is something that we can reconnect to. And so a widespread urban agrarianism would disperse both recognition of society as part of nature, while at the same time separate from it.

The basic premise of the metabolic rift is that industrialization and urbanization cause environmental and social problems in rural areas which remain invisible to those in urban environments, and the literature on urban agriculture as well as case studies under development here show how these issues are expressed in urban spaces as well. Tensions over land access, pollution affecting soil conditions, collapses the distinction between city and country for those who grow food in cities and provides urban people a frame of reference that connects to rural spaces. This can help in the development of agrarian citizenship in urban environments where urban and rural identities merge in a shared collective action frame against similar struggles.

It's hard to tell how 'self sufficient' urban farmers are as that data does not exist. It is reasonable to expect that most urban farmers do not produce all of their own food, and depend on the market for food provisioning. Growers are therefore both producers and consumers of food, which may or may not be commodified in the market. Further, as urban farms are educational and volunteer-oriented, those that involve participants in management decisions also blur subject positions, integrating urban consumers into a metabolic process, albeit on a fairly limited scale. This collapsing of subject positions, as with the nature/culture, urban/rural divides might help in relating urban actors to a shared agrarian identity frame.

Urban Agriculture's Demobilizing Tendencies

This is the melting pot where urban agrarianism can develop, but also in potentially contradicting ways. While there is reason to believe that urban agriculture can be a catalyst for change, on the other hand urban agriculture also

has the potential to demobilize urban social energy from leaving the city back to the country. And the tensions here in emergent urban agrarianisms are expressed differently across a number of interrelated urban actor positions (farmer, gardener, consumer, activist, and policy-maker).

McClintock (2014), citing Pudup, Allen and Guthman, suggests "the good deeds of organised urban agriculture projects, like other AFNs, actually bolster neoliberalism by providing food to those hit hardest by the roll-back of the welfare state" (156). Such food justice may lessen the blow dealt by capital's inequality but fails to address root systemic and historical causes of poverty and racism. The alternative food movement has, in this sense, been dismissed for the exclusionary tendencies of "progressive whiteness" (Slocum 2007) or 'elitist foodie-ism,' potentially diverting energy and resources away from participation in radical peasant struggles. And so for farmers and gardeners, activists and policy makers, urban agriculture may serve to pacify potential participants in more radical social movements.

Or collective action connected to urban agriculture may organize for the 'wrong target.' In the the proposal to develop new 'green' trendy (and exclusive) "agrarian-urbanism" inspired neighborhoods, for example, low density housing peppered with food production throughout "could never represent a living solution for everyone, but rather a privilege for a few" (Tornaghi, 2014: 516). The Transition Town movement, a localization movement addressing the interlinked challenges of peak oil, climate change and global financial instability (Hopkins, 2009), has been critiqued an example of this, where the proposal to create 'resilient' self-reliant ecotowns are viewed as elitist and exclusionary. Sustainable South Osborne is closely connected with the Transition Movement, with overlapping members participating in SSO and in Transition Winnipeg activities, and adopts through TW the language of resilience and localization. These values or virtues appear throughout urban agricultural practice as participants and organizations strive to be part of the making of a more sustainable 'local' food system. Failing to take a broader scale falls into 'the local trap,' praising the assumed ecological and justice superiority of that which is near irrespective of the actual performance along these lines (Born & Purcell, 2006). Focusing on the local and failing to adopt a 'reflexive localism' fails on the other elements of developing what Charles Levkoe calls a "transformative food politics," as it necessarily limits the scope of analysis to a subset of the wider food system and does not include rural producers in the identity frame (2011). In focusing on the local, and production within the city, consideration of more remote issues in the food system fall away as an urban agrarianism leads to a 'bury our heads in the sand' response to 'external' problems threatening sustainable food.

Several urban agriculture initiatives, like Sustainable South Osborne in Winnipeg, use the discourse of 'the commons,' which has roots as a radical proposal for decommodification of food and land. The South Osborne Permaculture Commons is a space that has a set of community-based management relations that have emerged organically from a community of users, embedded within a network structure that includes a number of different positions (such as garden club participant, garden site steward, member of Sustainable South Osborne, or member of an affiliated organization who shares garden space contained within the commons such as local schools, community centers or a community garden society). Over the years, rules have formalized around what counts as acceptable and unacceptable use of the shared food grown on site. However, this is only one layer of sovereignty over the food producing resources and the land. The groups still operate under regulation by municipal branches of government, who can easily revoke the tenuous arrangement to use the space. A conflict is already developing over the right to sell food produced on public land, whereas the non-profit organization has created a sister worker-co-op with the mandate of stewarding the land using revenue from produce sold to pay its members. Under municipal regulation in Winnipeg, this isn't strictly allowed, and no progress has been made in amending existing regulations. This has lead to a reorganization of the worker co-op, where the group has taken on more of an educational role in the commons, providing workshops and demonstrations to generate revenue to pay wages. However, this is also part of a bending to the neoliberalization of the food movement in Winnipeg in that SSO has adopted a 'social enterprise' model while still using the language of a commons. Food grown in the commons is now featured in a perennial fundraising event hosted by the city's top chefs, making the organization more organizationally successful, while adopting a more 'mainstream' identity. Therefore, the fringes of the notion of a shared, decommodified communal resource has started to fray, while at the same time the organization is arguably more successful in pursuing its mandate to increase urban agriculture in the community. The commons is also contextualized within a very non-decommodified political economy and are subject to other constraints in addition to state regulation, some economic (as in competing against other land interests, like proposals to use the space for the creation of a parking lot for a nearby hospital) and others cultural (as in neighbourhood rejection of the 'messiness' of a farm site in a residential neighborhood).

Concluding notes

What ways has urban agrarianism advanced and hindered food sovereignty as a political project? Food sovereignty as a global movement was made possible through the interconnections between urban and rural actors in the articulation of a vison for social change. Urban movement actors, policy allies, urban and rural producers and a general public of protest mixes in a multi-scalar agrarian citizenship operating on both urban and rural fronts. Urban participation has

been instrumental in this regard. Networking hubs for local organizations, centres for protests, major institutional headquarters and summits have all been urban-based with mass urban participation, energy and resources. Agrarian citizenship therefore has been partially urban based, and we argue holds potential to revitalize food sovereignty in diverse contexts. However, given urban agriculture's demobilizing tendencies outlined above, urban agrarianism also presents its own stumbling blocks. As is the case with any urban movements in the Global North, urban agrarianism can distract activists who campaign to save community gardens in danger of being developed while hundreds of thousands of acres of farmland are paved over or financialized. A missing link concerns how organizations bridging urban and rural landscapes can work to reinvest energy generated in urban social movements towards agrarian change. And so a new set of research questions emerges here, such as whether these organizations counter urban agriculture's demobilizing tendencies? How can organizations balance the need to support efforts addressing local concerns while also directing attention outside the city's borders? Are food justice movements that work to reduce urban hunger a potential source for urban agrarianism or is social movement energy a zero-sum game where activisms compete for participation? And do symbiotic organizations such as green businesses, large NGOs and state policy organizations serve as demobilization for urban agrarianism in the same way that urban agriculture may, and if so are there processes to counteract this? These questions frame the next stage in the conceptual development and exploration of the urban locus for the food sovereignty movement.

References:

Badami, M. G., & Ramankutty, N. (2015). Urban Agriculture and Food Security: A Critique Based on an Assessment of Urban Land Constraints. *Global Food Security*, *4*(C), 8–15.

Bellows, A. C., Brown, K., & Smit, J. (2003). *Health Benefits of Urban Agriculture. Community Food Security Coalition.*

Berry, W. (1992). The Pleasures of Eating. In D. Curtin & L. M. Heldke (Eds.), *Cooking, Eating, Thinking Transformative Philosophies of Food* (pp. 374–385). Bloomington: Cooking.

Block, D. R., Chávez, N., Allen, E., & Ramirez, D. (2011). Food Sovereignty, Urban Food Access, and Food Activism: Contemplating the Connections Through Examples from Chicago. *Agriculture and Human Values*, *29*(2), 203–215.

Born, B., & Purcell, M. (2006). Avoiding the Local Trap: Scale and Food Systems in Planning Research. *Journal of Planning Education and Research*, *26*(2), 195–207.

Bowness, E. and Desmarais A. A. (2016). "Food Sovereignty: A Multi-Faceted Social Movement". Conference Paper Presented at the *International Rural Sociological Association Congress*. Toronto.

Bradshaw, M. V. (2013). Rise of Urban Agriculture: A Cautionary Tale-No Rules, Big Problems, The. *William & Mary Business Law Review*, *4*(1), 241–267.

Brown, K. H., & Jameton, A. L. (2000). Public Health Implications of Urban Agriculture. *Journal of Public Health Policy*, *21*(1), 20.

Carlisle, L. (2013). Critical agrarianism. *Renewable Agriculture and Food Systems*, *29*(02), 135–145.

Clapp, J. (2014). Distant agricultural landscapes. *Sustainability Science*, *10*(2), 305–316.

Clarke, L. W., & Jenerette, G. D. (2015). Biodiversity and direct ecosystem service regulation in the community gardens of Los Angeles, CA. *Landscape Ecology*, *30*(4), 637–653.

Cockrall-King, J. (2012). Food and the City: Urban Agriculture and the New Food Revolution. Prometheus Books.

Counihan, C., & Siniscalchi, V. (Eds.). (2013). Food Activism: Agency, Democracy and Economy. London: Bloomsbury.

Davila, F., & Dyball, R. (2015). Transforming Food Systems Through Food Sovereignty: an Australian Urban Context. *Australian Journal of Environmental Education*, *31*(01), 34–45.

Debolini, M., Valette, E., François, M., & Chéry, J.-P. (2015). Mapping Land Use Competition in the Rural–Urban Fringe and Future Perspectives on Land Policies: A case study of Meknès (Morocco). *Land Use Policy*, *47*, 373–381.

DeLind, L. B. (2014). Where have all the houses (among other things) gone? Some critical reflections on urban agriculture. *Renewable Agriculture and Food Systems*, *30*(01), 3–7.

Oberholtzer, L., Dimitri, C., & Pressman, A. (2014). Urban Agriculture in the United States: Characteristics, Challenges, and Technical Assistance Needs. *Journal of Extension*, 1–11.

Dubbeling, M., & de Zeeuw, H. (2011). Urban Agriculture and Climate Change Adaptation: Ensuring Food Security Through Adaptation. In *Resilient Cities: Cities and Adaptation to Climate Change*. Proceedings of the Global Forum (pp. 1–580).

Edelman, M., Weis, T., Baviskar, A., Borras, S. M., Jr, Holt-Giménez, E., Kandiyoti, D., & Wolford, W. (2014). Introduction: Critical Perspectives on Food Sovereignty. *The Journal of Peasant Studies, 41*(6), 911–931.

Ehlert, J., & Voßemer, C. (2015). Food Sovereignty and Conceptualization of Agency: A methodological discussion. *Austrian Journal of South-East Asian Studies*, *8*(1), 7–26. http://doi.org/10.14764/10.ASEAS-2015.1-2

FFCF 2016. Farm Folk City Folk. Retrieved April 12 2016, from http://www.farmfolkcityfolk.ca/

Fieldhouse, P. (1995). Food and Nutrition: Customs and Culture. London: Chapman and Hall.

Godfray, H. C. J., Beddington, J. R., Crute, I. R., Haddad, L., Lawrence, D., Muir, J. F., et al. (2010). Food Security: The Challenge of Feeding 9 Billion People. *Science*, *327*(5967), 812–818.

Guthman, J. (2008). Neoliberalism and the making of food politics in California. *Geoforum*, *39*(3), 1171–1183.

Johnston, J. (2007). The Citizen-Consumer Hybrid: Ideological Tensions and the Case of Whole Foods Market. *Theory and Society*, *37*(3), 229–270.

Hassanein, N. (2003). Practicing Food Democracy: a Pragmatic Politics of Transformation. *Journal of Rural Studies*, *19*(1), 77–86.

Heynen, N. (2013). Urban political ecology I: The urban century. *Progress in Human Geography*, *38*(4), 598–604.

Heynen, N. C., Kaika, M., & Swyngedouw, E. (2006). In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism. Taylor & Francis.

Iles, A., & de Wit, M. M. (2015). Sovereignty at What Scale? An Inquiry Into Multiple Dimensions of Food Sovereignty. *Globalizations*, *12*(4), 481–497.

Kennedy, S. H. (2008). *The Garden*. Black Valley Films.

Koont, S. (2011). *Sustainable Urban Agriculture in Cuba.* Berlin: Springer.

Laidlaw, J., & Magee, L. (2015). Towards Urban Food Sovereignty: The Trials and Tribulations of Community-Based Aquaponics Enterprises in Milwaukee and Melbourne. *Local Environment*, *21*(5), 573–590.

Lee, G.-G., Lee, H.-W., & Lee, J.-H. (2015). Greenhouse Gas Emission Reduction Effect in the transportation sector by urban agriculture in Seoul, Korea. *Landscape and Urban Planning*, *140*, 1–7.

Levkoe, C. Z. (2011). Towards a Transformative Food Politics. *Local Environment*, *16*(7), 687–705.

Lin, B. B., Philpott, S. M., & Jha, S. (2015). The Future of Urban Agriculture and Biodiversity-Ecosystem Services: Challenges and Next Steps. *Basic and Applied Ecology*, *16*(3), 189–201

Lovell, S. T. (2010). Multifunctional Urban Agriculture for Sustainable Land Use Planning in the United States. *Sustainability*, *2*(8), 2499–2522.

Lovell, S. T., & Taylor, J. R. (2013). Supplying urban ecosystem services through multifunctional green infrastructure in the United States. *Landscape Ecology*, *28*(8), 1447–1463.

Lowenstein, D. M., Matteson, K. C., & Minor, E. S. (2015). Diversity of wild bees supports pollination services in an urbanized landscape. *Oecologia*, *179*(3), 811–821.

Lwasa, S., Mugagga, F., Wahab, B., Simon, D., Connors, J. P., & Griffith, C. (2015). A meta-analysis of urban and peri-urban agriculture and forestry in mediating climate change. *Current Opinion in Environmental Sustainability*, *13*, 68–73.

Martellozzo, F., Landry, J.-S., Plouffe, D., Seufert, V., Rowhani, P., & Ramankutty, N. (2014). Urban Agriculture: A Global Analysis of the Space Constraint to Meet Urban Vegetable Demand. *Environmental Research Letters*, (9), 1–9.

Marx, K. (1967). Capital: Volume III: A Critique of Political Economy: The Process of Capitalist Production as a Whole. (F. Engles, Ed.) (pp. 1–645). New York: International Publishers.

McClintock, N. (2010). Why Farm the City? Theorizing Urban Agriculture Through a Lens of Metabolic Rift. *Cambridge Journal of Regions, Economy and Society*, *3*(2), 1–17.

McClintock, N. (2014). Radical, Reformist and Garden-Variety Neoliberal: Coming to Terms with Urban Agriculture's Contradictions. *Local Environment*, *19*(2), 147–171.

McMichael, P. (2014). Historicizing Food Sovereignty. *The Journal of Peasant Studies*, *41*(6), 933–957.

Mincyte, D., & Dobernig, K. (2016). Urban Farming in the North American Metropolis: Rethinking Work and Distance in Alternative Food Networks. *Environment and Planning A*, *48*(9), 1767–1786.

Mougeot, L. J. A. (2005). *Agropolis*. IDRC.

Pearson, L. J., Pearson, L., & Pearson, C. J. (2010). Sustainable urban agriculture: stocktake and opportunities. *International Journal of Agricultural Sustainability*, *8*(1), 7–19.

Pfeiffer, A., Silva, E., & Colquhoun, J. (2014). Innovation in urban agricultural practices: Responding to diverse production environments. *Renewable Agriculture and Food Systems*, *30*(01), 79–91.

Polletta, F., & Jasper, J. M. (2001). Collective Identity and Social Movements. *Annual Review of Sociology*, *27*, 283–305.

Pourias, J., Aubry, C., & Duchemin, E. (2015). Is Food a Motivation for Urban Gardeners? Multifunctionality and the Relative Importance of the Food Function in Urban Collective Gardens of Paris and Montreal. *Agriculture and Human Values*, 1–17.

Pribadi, D. O., & Pauleit, S. (2015). The dynamics of peri-urban agriculture during rapid urbanization of Jabodetabek Metropolitan Area. *Land Use Policy*, *48*, 13–24.

Reardon, T. A., Bereuter, D., & Glickman, D. (2016). *Growing Food for Growing Cities: Transforming Food Systems in an Urbanizing World*. Chicago Council on Global Affairs.

Reynolds, R. (2009). On Guerrilla Gardening: A Handbook for Gardening Without Boundaries. Bloomsbury Publishing UK.

Roman-Alcalá, Roman-Alcalá, A. (2015). Broadening the Land Question in Food Sovereignty to Northern Settings: A Case Study of Occupy the Farm. *Globalizations*, *00*(4), 1–14. http://doi.org/10.1080/14747731.2015.1033199

Satterthwaite, D., McGranahan, G., & Tacoli, C. (2010). Urbanization and its Implications for Food and Farming. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *365*(1554), 2809–2820.

Schneider, M., & McMichael, P. (2010). Deepening, and Repairing, the Metabolic Rift. *The Journal of Peasant Studies*, *37*(3), 461–484.

Thebo, A. L., Drechsel, P., & Lambin, E. F. (2014). Global Assessment of Urban and Peri-Urban Agriculture: Irrigated and Rainfed Croplands, *9*, 1–10.

Tornaghi, C. (2014). Critical Geography of Urban Agriculture. *Progress in Human Geography*, *38*(4), 551–567.

Valley, W., & Wittman, H. (2016). Urban Agriculture in Vancouver, BC: Motivations, Meanings and Multi-functionality. In M. Deakin, D. Diamantini,

& N. Borrelli (Eds.), *Governance of City Food Systems: Case Studies From Around The World* (pp. 41–61).

Vidgen, H. A., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite*, *76*(C), 50–59.

Weissman, E. (2015). Entrepreneurial Endeavors: (Re)Producing Neoliberalization Through Urban Agriculture Youth Programming in Brooklyn, New York. *Environmental Education Research*, *21*(3), 351–364

Weissman, E. (2014). Brooklyn's Agrarian Questions. *Renewable Agriculture and Food Systems*, *30*(01), 92–102. http://doi.org/10.1017/S1742170514000222

Wekerle, G. R., & Classens, M. (2015). Food Production in the City: (Re)Negotiating Land, Food and Property. *Local Environment*, *20*(10), 1175–1193.

Widener, P., & Karides, M. (2014). Food System Literacy: Empowering Citizens and Consumers Beyond Farm-to-Fork Pathways. *Food, Culture and Society: an International Journal of MultidisciplinaryResearch*, *17*(4), 665–687.

Wittman, H. (2009 A). Reframing agrarian citizenship: Land, life and power in Brazil. *Journal of Rural Studies*, *25*(1), 120–130.

Wittman, H. (2009 B). Reworking the Metabolic Rift: La Vía Campesina, Agrarian Citizenship, and Food Sovereignty. *The Journal of Peasant Studies*, *36*(4), 805–826.

Wittman, H. (2015). From Protest to Policy: The challenges of institutionalizing food sovereignty. *Canadian Food Studies / La Revue Canadienne Des Études Sur L'alimentation*, *2*(2), 174–182.

Wortman, S. E., & Lovell, S. T. (2013). Environmental Challenges Threatening the Growth of Urban Agriculture in the United States. *Journal of Environmental Quality*, *42*(5), 1283–1294.

Sharma, K., Cheng, Z., & Grewal, P. S. (2014). Relationship between soil heavy metal contamination and soil food web health in vacant lots slated for urban agriculture in two post-industrial cities. *Urban Ecosystems*, *18*(3), 835–855. http://doi.org/10.1007/s11252-014-0432-6

Wright, E. O. (2010). Envisioning Real Utopias. London and New York: Verso.

Yamashita, L., & Robinson, D. (2016). Making Visible the People Who Feed Us: Educating for Critical Food Literacy Through Multicultural Texts. *Journal of Agriculture, Food Systems, and Community Development*, *6*(2), 1–13

Zezza, A., & Tasciotti, L. (2010). Urban agriculture, poverty, and food security: Empirical evidence from a sample of developing countries. *Food Policy*, *35*(4), 265–273.

Zimmer, A. (2010). Urban Political Ecology. Theoretical concepts, challenges, and suggested future directions. *Erdkunde*, *64*(4), 343–354

Nazioarteko Hizketaldia

ELIKADURAREN ETORKIZUNA ETA NEKAZARITZAREN ERRONKAK XXI. MENDERAKO:

Mundua nork, nola eta zer-nolako inplikazio sozial, ekonomiko eta ekologikorekin elikatuko duen izango da eztabaidagaia

2017ko apirilaren 24 / 26. Europa Biltzar Jauregia. Vitoria-Gasteiz. Araba. Euskal Herria. Europa.

International Colloquium

THE FUTURE OF FOOD AND CHALLENGES FOR AGRICULTURE IN THE 21st CENTURY:

Debates about who, how and with what social, economic and ecological implications we will feed the world.

April 24th - 26th. Europa Congress Palace. Vitoria Gasteiz. Álava. Basque Country/Europe

Coloquio Internacional

EL FUTURO DE LA ALIMENTACIÓN Y RETOS DE LA AGRICULTURA PARA EL SIGLO XXI:

Debates sobre quién, cómo y con qué implicaciones sociales, económicas y ecológicas alimentará el mundo.

24 / 26 de Abril, 2017. Palacio de Congresos Europa. Vitoria-Gasteiz. Álava. País Vasco. Europa.

GUNTZAILEAK/COLABORAN/COLLABORATING ORGANIZATIONS

LAGUNTZA EKONOMIKOA/APOYAN/WITH SUPPORT FROM