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**Locating food sovereignty: geographical and sectoral
distance in the global food system**

*Martha Jane Robbins**

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Abstract

This paper seeks to problematize the role of local food systems within the food sovereignty movement and as a counter to the logic of the global industrial food system. It answers the question of how food sovereignty, via its tenet of local food systems, addresses the geographical and sectoral distances in the global food system. In doing this, it utilizes an approach loosely based on Chayanovian thinking and analytical tools provided through food regime analysis, the theory of uneven geographical development and the metabolic rift. The paper explores six forms of distance in the industrial food system – production from consumption, distant markets, peasants from their land, producers from consumers, the rural-urban divide and agriculture from nature. Then the paper situates local food systems within food sovereignty and food sovereignty within the wider transnational agrarian movements from which it emerged. Next the paper differentiates local food systems by scale, method and character. Finally, it illustrates how and to what extent food sovereignty counters these distances by evaluating the abilities and gaps of food sovereignty in relation to the various forms of distance.

Keywords

Food sovereignty, local food systems, industrial food system, distance, capital accumulation.

Acronyms

AIAB	Associazione Italiana per l'Agricoltura Biologica
CECCAM	Centro de Estudios para el Cambio en el Campo Mexicano
CSA	Community-Supported Agriculture
DESA	Department of Economic and Social Affairs of the UN
DNFTO	Dominica National Fair Trade Organization
ERS	Economic Research Service – US Department of Agriculture
EFAO	Ecological Farmers Association of Ontario
ESAFF	Eastern and Southern Africa Small Scale Farmers' Forum
FAO	United Nations Food and Agriculture Organization
GMO	Genetically Modified Organism
ICC	International Coordinating Commission of LVC
IFAD	International Fund for Agricultural Development
IFOAM	International Federation of Organic Agriculture Movements
ILO	Intensive Livestock Operation
IPC	International Program Committee of the NFU
KRRS	Karnataka Rajya Ryota Sangha of India
LVC	La Via Campesina
MST	Movimento dos Trabalhadores Rurais Sem Terra of Brazil
NAFTA	North American Free Trade Agreement
NFU	National Farmers Union of Canada
StatsCan	Statistics Canada
TAM	Transnational Agrarian Movement
UN	United Nations
UNAC	Uniao Nacional de Camponeses of Mozambique
UNStatsDiv	United Nations Statistics Division
US	United States of America
WINFA	Windward Islands Farmers' Association
WTO	World Trade Organization
ZIMSOFF	Zimbabwe Smallholder Organic Farmers Forum

Locating food sovereignty¹

Geographical and sectoral distance in the global food system

1 Introduction

1.1 The global industrial food system and its critics

When world food prices spiked in 2008 causing widespread “food rebellions” (Holt-Gimenez et al. 2009), international attention was once again focused on questions of hunger, food production and rural development. Debates on the merits and pitfalls of a highly integrated, industrialized global food system were reignited. These debates have gained urgency as the food crisis collided with the financial crisis, climate crisis and energy crisis. The outcome of the debates on the future of the global food system will have dramatic impacts on peasants, small-scale farmers and urban consumers in the global South and North and has the potential to re-shape rural development paradigms and change agriculture’s role in relation to wider development discourses.

Processes of capitalist development and its logic of profit-making and continuous accumulation have shaped the dominant global food system. Simply understood, capital accumulation is the process of reinvesting profits into more production to make more profits (Bernstein 2010: 25). Beginning in the 1970s, globalization is the most recent phase of reorganization in capitalist relations on a global scale and it has had a major influence in the structure and dynamics of the global food system (Ibid: 79). Globalization’s implications for agriculture include increased trade liberalization and corporate concentration, the “supermarket revolution”, introduction of new technologies such as genetically modified organisms (GMOs), the drive to patent plant genes, increasing inequality and many others (Ibid: 82-83; Holt-Gimenez and Shattuck 2011: 111; Borras 2009: 6-9). The outcome of this interaction between capitalist processes and the global food system will be referred to as the *global industrial food system* or the *global capitalist food system* interchangeably throughout the paper. This way of organizing the food system – production, distribution and consumption – has had many long-term implications for people around the world, such as displacement and dispossession, dietary changes, and a widening gap between producers and consumers; and a large impact on the environment in terms of biodiversity loss, soil depletion, deforestation, greenhouse gas emissions, etcetera (Weis 2010; Van der Ploeg 2010; McMichael 2008). Bello and Baviera (2010: 73) note that the food price crisis, while exacerbated by factors such as the agrofuel boom and commodity speculation, “must be seen as a critical juncture in the centuries-long process of displacement of peasant agriculture by capitalist agriculture.”

¹ The author would like to acknowledge professors Jun Borras and Murat Arsel for their support, critiques and suggestions; the key informants for generously sharing their experience and knowledge; and the ISS community for providing a space to think about the issues presented here.

As a product of these global arrangements and the tendency of capitalism to diminish barriers to movement over space and time, distance is a prevailing feature of modern agriculture and the current agro-industrial food system (Harvey 2010: 41-42). According to the online Oxford Dictionaries (2012), the definition of *distance* is simply “the length of space between two points” and *to distance* is to “make (someone or something) far off or remote in position or nature”. Clapp (2005: 3-4) uses the concept of distancing to explore geographic, cultural, agency, and power dimensions of waste disposal and its environmental and social consequences. This paper will analyze distance in the global industrial food system through its geographical and sectoral dimensions. The distance within the global industrial food system takes both the literal form of distant geographies, for example the physical distance food travels from field to plate, as well as the metaphorical form between sectors, for example the constructed distance between rural and urban dwellers as urban consumers are less and less connected to where their food comes from and who has produced it.

A key component of resistance to the current industrialized and globalized structures of the food system is a focus on (re)localizing food production and consumption. Localization can be viewed, then, as a direct counter to specific forms of distance in the food system. As an integral part of an alternative food system, localization can also be viewed in opposition to the wider industrial agriculture model. Yet it is unclear if localization can necessarily be equated with a democratized food system or if all attempts at localization can be viewed as direct critiques of the industrial model. While localization efforts may be able to address the most accessible conception of geographic distancing, that is physical distancing of food between place of production and place of consumption, can they also adequately address more complex notions of distancing? The ambiguous nature of defining *local* and *local food systems* makes this task more challenging (Hinrichs 2003: 33). A 2010 Economic Research Service (ERS) report in the United States noted that local food systems are defined in geographic terms as well as by “social and supply chain characteristics” (Martinez et al. 2010: 3). Feagan (2007: 24; emphasis in original) states that local food systems are essentially defined by their aspiration for “respatializing and reconfiguring agricultural systems”. In this paper, local food system definitions and their broad characteristics will be explored.

Peasants, social movements and civil society organizations are putting forward alternative paradigms such as food sovereignty in response to the consolidation of the industrial food system. The emergence of the food sovereignty framework, which was first presented on the world stage at the World Food Summit in 1996 by the international peasant and small-scale farmers’ movement, La Via Campesina (LVC), articulates a “radical alternative... that put control of productive resources (land, water, seeds and natural resources) in the hands of those who produce food” (Wittman et al. 2010: 3). Food sovereignty was expressed in direct response to the influential mantra of food security (Patel 2009: 665). “[Food sovereignty proponents] reject food security as the discourse of the powerful and propose in its stead an alternative that more faithfully relays the needs of small farmers and conjures

the image of an alternative regime in which these needs might be better met” (Fairbairn 2010: 27). Whereas the food security paradigm seeks to modify existing food system structures to better address hunger and lack of access of food, food sovereignty strives for an entirely different food system (Ibid).

Food sovereignty has been defined in a variety of ways as it evolves (Patel 2009). Broadly, it is the “right of nations and peoples to control their own food systems” (Wittman et al. 2010: 2). It incorporates the notion of localization as an integral part of building alternative food systems. The declaration from Nyeleni 2007 Forum for Food Sovereignty says that, “[Food sovereignty] offers a strategy to resist and dismantle the current corporate trade and food regime, and [to provide] directions for food, farming, pastoral and fisheries systems determined by local producers. Food sovereignty prioritises local and national economies and markets and empowers peasant and family farmer-driven agriculture, artisanal-fishing, pastoralist-led grazing, and food production, distribution and consumption based on environmental, social and economic sustainability” (Nyeleni 2007a). Local markets, local economies and local production are all key aspects of a food sovereignty approach.

1.2 Is localization enough?

Academic exploration of food sovereignty has surged recently, including at least two books (Wittman et al. 2011 and Wittman et al. 2010) and numerous journal articles. Its origins have been explored (Patel 2009); its relationship to agrarian reform (Rosset et al. 2011), to the right to food (Claeys 2012; Beuchelt and Virchow 2012), to the environment (Rosset et al. 2011; Martinez-Alier 2011; Altieri 2009; Altieri and Nicholls 2008), and many other topics has been investigated. However, a direct dissection of the conceptualization of *local* in food sovereignty discourse has yet to be undertaken. The literature on localization of agriculture and food systems is fairly extensive and many of the works concentrate on specific examples of local food system elements such as direct marketing (Wittman et al. 2012; Feagan 2008), public procurement mechanisms (Friedmann 2007), sustainability (Turner 2011; Baker 2008), and inequality and food system politics (Allen and Wilson 2008; Guthman 2008; Hinrichs 2003). The emphasis on localization within food sovereignty has not been unpacked in a systematic way and there are many tensions, contradictions and gaps that require exploration. The first set of questions surrounding localization revolves around its ability to challenge the existing food system. Here, it is important to differentiate various strategies for localizing food systems. Is localization actually (and necessarily) a challenge to the globalized, industrialized food system? Or is it merely a niche within the existing regime that allows affluent consumers more choice in their consumption habits?

Second, what does localization mean? Particularly in contexts like the Canadian prairies or post-colonial plantation areas in the global South where agriculture was developed solely on the basis of exports, the idea of re-localization is not valid. In these contexts, is localization a legitimate option? How does a localized food system deal with a reliance on export-oriented agriculture as the basis of an economy? In these circumstances, does

localization mean creating a parallel food system without altering the dominant one?

Third, while local food systems can demonstrably connect consumers more directly to producers, questions remain about who those consumers are. Related to this, there are a series of questions on the ability of local food systems to provide affordable food to consumers. Can local food systems adequately feed those living in poverty and low-income situations, those who cannot afford to pay premium prices for local, ecologically produced food products? Can and will the working classes in both rural and urban settings participate in local food systems while the industrial food system continues to provide cheap food? If local production privileges fair prices for producers, can it at the same time provide inexpensive food for all consumers, particularly given that the majority of rural households, including farmers, are net-food buyers (Rapsomanikis et al. 2009: 48; FAO 2008: 75-76)? Or is local food a contradiction to the goal of food for all?

Fourth, how do local food systems deal with massive urban areas and the millions of people living in them that need to eat? The food sovereignty framework was first conveyed by the rural movement La Via Campesina, and to a large extent, it remains in the rural domain. Attempts to broaden the network of advocates for food sovereignty have been successful in solidifying the support of non-governmental organizations and entities with an environmental focus but the connection between rural and urban movements is largely absent. Can local food systems have the capacity to feed large urban centres? Can food sovereignty discourse integrate the urban food movements that often deal with practical issues of access to food and may not seek major food system transformation? It is important to examine if attempts at food system localization, which are occurring both inside and outside the food sovereignty framework and in both urban and rural spaces, can bridge this gap.

Holt-Gimenez and Shattuck (2011: 132) suggest that, “The challenge for food movements is to address the immediate problems of hunger, malnutrition, food insecurity and environmental degradation, while working steadily towards the structural changes needed for sustainable, equitable and democratic food systems.” What role do local food systems play in this? Which elements of this challenge are addressed by local food systems? Do localization efforts have the ability to address both the practical, immediate issues in the industrial food system while simultaneously posing a substantial challenge and presenting a viable alternative to the dominant model? How central are local food systems to the realization of transformative food sovereignty? Within the confines of this research paper, these questions cannot all be adequately addressed. Keeping all of these factors in mind, however, the central question is: *How does the food sovereignty framework, and in particular, its call for local food systems, address geographical and sectoral distancing in the current global industrial food system?*

1.3 Organization and argumentation

In order to address the research question, Chapter 3 will explore six variations of distance within the global industrial food system – the separation of

production from consumption, producers from markets, peasants from their land, producers and consumers, rural and urban, and agriculture from nature. Chapter 4 will situate local food initiatives within the wider food sovereignty framework, in the context of the transnational agrarian movements that developed and espouse it. It will also differentiate local food systems by examining the scale, method and character of food sovereignty based versus capitalist agriculture based localization efforts. Both of these chapters will be informed by the analytical tools and approaches outlined in Chapter 2. Finally, Chapter 5 will present an investigation of how food sovereignty and local food systems address the six forms of distance elaborated earlier and offer a synthesis of insights and conclusions as well as avenues of future research.

This paper will show that distance in various forms is an inherent feature of the global industrial food system. It will argue that not all local food systems are a manifestation of food sovereignty nor do they all help build the alternative model that food sovereignty proposes. It is also illustrated in this paper that local food systems rarely meet the ideal type of either food sovereignty or the capitalist industrial model and instead fall somewhere in between. The paper will also argue that in order to address existing distances, more than just the local food system aspect of food sovereignty needs to be present. In providing a political and practical alternative to the current global industrial food system, however, food sovereignty is constrained by the nature of transnational agrarian movements where demands are mediated by many voices and a diversity of positions and by the character of the capitalist system within which this alternative exists. This leaves some of the questions posed above unresolved by the current theory and practice of food sovereignty. Although local food initiatives in the framework of food sovereignty do not fully address the distances in the dominant food system, food sovereignty aspires to a paradigm shift in rural development thinking and is a central proposition in the contested arena of the food system because of the transnational agrarian movements that support it.

1.4 Scope and limitations

The scope of this research is a macro analysis of the dominant global food system in relation to one aspect of one of its alternatives. It is not confined to a particular case study or location but rather offers a wide lens through an analytical exploration of the subject using theoretical tools, long-standing debates and some specific examples. Particular local food programs, while alluded to and used as examples, are not explicitly the focus of this research.

A number of choices had to be made to fit this analysis into the confines of the research paper. The role of the state and its institutions, while a significant part of how food systems function and how processes of capital accumulation are restricted or enabled, will not be engaged with here. Many other dimensions of distance could be explored, such as institutional distance or cultural distance but the paper has been limited to an exploration of the two dimensions of distance that most readily correspond with the question of

whether and to what extent local food systems counter the global industrial food system.

2 Analytical framework

2.1 Approaching the peasantry

In addressing the themes of food sovereignty and food system localization it is first necessary to revert to two longstanding, overlapping debates in the literature. To begin, the question of whether or not peasants still exist in a capitalist world is central to determining what role, if any, peasants have in the development of ecologically sound, socially just and democratic global food systems. Secondly, exploring the possibility of whether peasant agriculture exists or can exist outside the logic of capitalist accumulation provides intellectual space for an exploration of whether and how food sovereignty and its tenet of food system localization challenge the dominant global capitalist industrial food system.

The definition of peasant is itself highly contested. Bernstein (2010: 3) notes that *peasant* usually refers to subsistence production and he argues it is a term that ceases to apply once the transition to capitalism has occurred. Scott's (1976) work is also based on the subsistence orientation of peasants. Chayanov (1966: 5) defines peasants as farmers that rely exclusively on the labour of their own families without hiring waged workers. Deere and de Janvry (1979: 601) favour defining peasants according to the relations of production and surplus extraction between producers and "appropriators". The emergence of the international peasant movement, La Via Campesina, in the mid-1990s and its subsequent consolidation offer a broader (critiqued as too broad) definition of peasants. As Desmarais (2002: 100; emphasis added) writes, "Armed with a strong collective identity as '*people of the land*', together with an uncompromising drive to continue to make a living in the countryside by growing food, the Via Campesina organizations are fighting for the right to exist".

The debate surrounding the existence and role of peasants has been long and arduously disputed. The contrasting contributions of Alexander Chayanov and Vladimir Lenin in the late 19th and early 20th century Russia/Soviet Union exemplify two radically different positions with regard to the questions posed above. Lenin believed in the inevitable differentiation of peasants where a few would become capitalist farmers while the majority would become semi- or fully-proletarianized and in this way would eventually provide both the labour needed for rapid industrialization and the market for new industrial products (Lenin 1982: 131-134). This view of peasant differentiation into different classes coincided with an industrial logic of progress and development based on large-scale production units, the exploitation of agricultural resources and expanded production to fuel industrialization, and a notion of peasants as backward and obsolete (Shanin 2009: 86; Kay 2009: 108; Weis 2010: 334). From this perspective, the disappearance of the peasantry is both unavoidable and necessary (Shanin 2009: 86, 95). Mainstream perspectives grounded in neo-classical economics share this version of development as a linear process of

industrialization (Rostow 1960) and likewise view peasants as “an historical anachronism, or as a receding baseline of development” (McMichael 2008: 205).

Chayanov, on the other hand, believed that peasants would continue to exist in the countryside and in fact had a role to play in the development project. His theory of differentiation was based on a labour-consumer balance between family members who were able to work and those who were consuming without producing; this balance or ratio of workers to consumers within a peasant household changed over time but did not constitute a permanent differentiation away from the countryside (Chayanov 1966: 254-255; Bernstein 2009: 59; Thorner 1988: xv-xvii). Chayanov argued that peasants would continue to exist not only because peasant differentiation was cyclical but also because of their propensity for self-exploitation – peasants’ ability to work longer hours or more intensely in order to secure their own basic needs (Bernstein 2009: 59; Thorner 1988: xvi). Scott (1976: Chapter 1) further elaborated this position as the “subsistence ethic”, where peasants pursue subsistence rather than accumulation. Chayanov advocated a role for peasants in development by outlining that productivity gains would be better achieved through utilizing the optimal scale of production for each type of farming, a combination of large and small-scale units, rather than concentrating only on large-scale production (Shanin 2009: 88-89).

Related to this, a pivotal disagreement for the arguments of this paper hinges on whether peasant agriculture operates within the capitalist logic of accumulation or outside of it. In other words, how effectively have peasants managed to resist the encroachment of capitalism, specifically in relation to the formation and operation of local food systems? Capitalism’s defining features of commodity production – goods and services produced “for market exchange in order to make a profit” (Bernstein 2010: 25) - and endless accumulation have left a definitive mark on agricultural production worldwide. While class differentiation defined by Lenin left only capitalist farmers producing the majority of agricultural products within the framework of commodity production and accumulation, Chayanov (1966) argued that peasants operated outside the capitalist logic entirely. He suggested that the peasant or family economy relied on a “discreet operational logic” (Shanin 2009: 95); one based on self-exploitation, as mentioned above, and not reliant on the wage relationships characterizing capitalist relations (Chayanov 1966: 1-28; Thorner 1988: xiv). Scott’s (1976) moral economy argument builds on the notion that peasant economics are distinct from capitalist imperatives (Edelman 2005: 334). A third key figure in these debates was Karl Kautsky, who suggested that capital might not encroach into peasant production if it benefited from wage suppression and did not have to take on the risks associated with agricultural production, in other words capitalism “tolerated” peasants in certain circumstances (Akram-Lodhi and Kay 2010: 188; Bernstein 2010: 94). This debate has not been resolved in the literature and will not be adequately resolved here.

However, the important element of the Chayanovian and Kautskyian approach is the idea that peasants *can* operate outside the logic of capitalist

accumulation while still engaging in markets. In Isakson's (2009) study of Guatemalan peasant market engagement, he argues that peasant reproduction is facilitated in part by market income. Chayanov's idea of peasant economies did not preclude the sale of surplus to markets and in fact, his promotion of vertical cooperatives was precisely to maximize productivity in order to allow agriculture to fuel the industrialization process (Shanin 2009: 88-89). Within the wider debate on the interplay between agriculture and industry, Kay (2009:107) states that the "agrarianist" position relied on the argument that "...industrialization could only proceed at a pace at which the agricultural sector was able to produce, and peasants were willing to provide, a marketable surplus". The idea that peasants can and do operate outside the capitalist logic of accumulation yet still engage in markets and the production of a marketable surplus beyond basic subsistence production allows for an exploration of whether and how far contemporary local food system strategies act as an antithesis to agriculture organized via capitalist relations.

The refusal of peasants to disappear, based on the assertion of their own existence rather than a resolution of the definition debate, can be regarded either as a hangover of a past era, a sign that modernity and capitalist development has not yet penetrated everywhere, or as proof of peasant resilience and their ability to exercise agency in resisting their incorporation into capitalist agricultural development. The starting point here is the latter. The conceptualization of the term "food sovereignty" follows the thinking of Alexander Chayanov and others who argued that peasant economies operate outside the logic of capitalism and that peasants should be central to any agriculture and food structure, rather than assumed obsolete and irrelevant for modern agricultural development.

The most relevant weaknesses of the Chayanovian approach for this paper are that its scope of analysis is mainly focused at the micro or meso levels rather than the macro level and the definitions of "peasant" utilized by its key figures are often broad. These definitions may be elegant in their simplicity yet they may also prove limiting in an analysis of contemporary manifestations of peasant agriculture. The analysis of food sovereignty as a counter to the industrial food system must also take into account macro level contexts and processes in order to dissect the characteristics of the wider capitalist transformation of agriculture and the propositions for opposing it. The approach has also faced critique for not explicitly engaging in class analysis. This weakness makes it difficult to discuss who is benefitting from local food programs and how local food production is differentiated, both of which are necessary aspects in evaluating the ability of local food systems to respond to the capitalist industrial agriculture project. In order to address the gaps outlined above, the paper will also draw on a wider political economy approach, outlined as "the social relations and dynamics of production and reproduction, property and power in agrarian formations and their processes of change, both historical and contemporary" in the *Journal of Agrarian Change* mission statement (as quoted in Bernstein 2010: 1).

2.2 Tools for analysis

Three main theoretical formulations are employed in the paper to inform the analysis and frame the conceptualization of food sovereignty and local food systems in relation to capitalist development and the global industrial food system.

Food regime analysis

Food regime analysis provides a useful tool to analyze localization and food sovereignty within a particular historical and political setting. It contextualizes the processes of distancing and localization and appeals to both political economy and political ecology as its foundation (McMichael 2009a: 139). Food regimes are defined as “stable periodic arrangements in the production and circulation of food on a world scale, associated with various forms of hegemony in the world economy” (McMichael 2009b: 281). Distinct historical periods of capitalist accumulation in agriculture, illustrated by global commodity flows, distinguish each food regime.

The first food regime is identified as the period of British hegemony that was consolidated in the 1870s and lasted between forty and sixty years (Bernstein 2010: 66-67; McMichael 2009a: 141). This food regime was characterised by the flow of staple crops from the colonies to Europe to fuel industrialization, particularly in Britain. The second food regime was distinguished by the export of surpluses, often in the form of food aid, from the United States to postcolonial states in the political context of the Cold War from the 1950s to 1970s (McMichael 2009a: 141). Philip McMichael and others have identified a third food regime, but both its existence and form are contested. McMichael contends that a corporate food regime has been established that maintains residual elements from the previous regime, yet is a distinct new arrangement on a global scale (McMichael 2009a: 148). Holt-Gimenez and Shattuck (2011: 110-111) characterize it as “neo-liberal capitalist expansion” based on liberalization secured by structural adjustment programs and free trade agreements. Harriet Friedmann, in contrast, posits that a new food regime may be emerging but has not been secured as a hegemonic force (McMichael 2009a: 148).

Each food regime is accompanied by a period of transition and struggle as the last regime falters and a new regime is consolidated. These periods of transition are spaces where the contestation between development models, modes of accumulation, types of agricultural systems and different food system actors can be observed, however McMichael (2009a: 146-147) also recognizes that food regimes themselves encompass tensions and contradictions at a particular historical moment. Food sovereignty and the social movements that advance it can therefore be positioned as part of the contested transition to a third, corporate food regime, or as a pivotal dynamic within an existing corporate food regime. In either formulation, irrespective of whether one argues a corporate food regime is in its infancy or has already been fully consolidated, food sovereignty is situated as a challenge or “counter-

mobilization” to the current global industrial food system (Ibid; Holt-Gimenez and Shattuck 2011).

From urban bias to uneven geographical development

Michael Lipton’s urban bias theory suggests that rural areas are disadvantaged by policies that favour industry over agriculture and urban industrialization over the welfare of rural areas, specifically in the global South (Lipton 1977; Kay 2009: 110). Lipton argued that the arrangement whereby goods from cities are sold in rural areas at inflated prices and conversely, rural products are sold at reduced prices in urban areas exacerbates urban bias (Jones and Corbridge 2010: 4). Lipton’s contention is that poverty reduction would be more readily achieved through investment in small-scale farms and off-farm employment rather than investment in large-scale industries or urban areas and thus, a reversal of the urban bias is required (Ibid). The urban bias thesis seeks to explain the disconnection between rural and urban sectors and the underdevelopment of rural areas and it is enticing for its orderly categorization of urban and rural and its candid call for more attention to the rural sector.

However, although the urban bias theory makes several legitimate claims and continues to appear as a supporting argument for focusing development policies on agricultural growth (exemplified by The World Bank 2007: 10 *World Development Report 2008* and the firm affirmation of Bezemer and Headley 2008 that urban bias both continues to exist and hinder poverty reduction strategies), the theory has also been widely critiqued. The most relevant critique for this research is that it mislabels class interests and in so doing creates artificial rural and urban classes that lump rural landlords into the urban class and urban poor into the rural class (Byres 1979; Kay 2009: 111; Jones and Corbridge 2010: 5). This blurring may support the notion of sectoral distance between urban and rural sectors but it does so with flawed categorization. A second limitation for applying urban bias to the question of how food sovereignty challenges the various forms of distance in the industrial food system is that Lipton asserts urban bias expressly in a *developing* world context whereas food sovereignty’s potential challenge to the global food system attempts to go beyond the dichotomy of developed and developing worlds, while still acknowledging differences in context and history.

In contrast to urban bias theory, which explicitly marks the separation between rural and urban sectors, David Harvey (2006) outlines a theory of uneven geographical development that exposes a different set of logics, but which nonetheless relates to the question of sectoral divide and the geographical implications of capitalist processes. Harvey’s (2006: 75) theory relies on the blending of four components: capital accumulation as materially embedded in the “web of socio-ecological life”; “accumulation by dispossession”; how capital accumulation operates in space and time; and, the interface with political and social struggles. There are many elements to Harvey’s theory and within the limits of this paper only a few key ideas will be invoked to frame the analysis. First, Harvey’s (2006: 76) understanding of theory as a dialectical process that “...is perpetually negotiating the relation

between the particular and the universal, between the abstract and the concrete” is a valuable way to consider the many levels that food sovereignty and food system localization take place. Food sovereignty is a political discourse, a proposition and in some ways, an abstract description of a desired system of agricultural production, distribution, consumption and social relations. In another sense, food sovereignty is a grounded practice of concrete political, economic, and social steps toward a specific vision for the food system and the actors involved in it.

Harvey’s discussion of the material embeddedness of social processes, including capital accumulation, offers a way to think about where the industrial food system is actually located as well as describe the distances within it. “Capitalist activity is always grounded somewhere”, he notes (Ibid: 78), and this is an entry point into the relationship between capital accumulation and nature. Acknowledging the material character of abstract global commodity markets or other seemingly abstract elements of the global industrial food system tests the conceptualization of capitalism as acting upon nature without also being influenced by it in return (an idea revisited below). Clear linkages can be made between *accumulation by dispossession* and, for example, geographical distancing understood as displacement of peasants from their land. But it is also possible to make the link between accumulation by dispossession and some forms of localization, paralleling Harvey’s argument of appropriation of creativity (Ibid: 92). Insights into the industrial food system (including rural/urban chasms) and the barriers for local food systems can be gleaned from Harvey’s presentation of how uneven geographical development is produced through relationships between capital accumulation and space and time. Finally, Harvey identifies social struggle not simply as opposition to the logic of capital accumulation but also as formative in the way capital accumulation occurs (Ibid: 112).

The metabolic rift and beyond

Marx’s idea of the separation between humans and nature characterized by the rupture of the natural nutrient cycle has subsequently been labeled the metabolic rift. Foster (1999: 383) explains that this idea of ruptured metabolism was used by Marx “to capture the material estrangement of human beings in capitalist society from the natural conditions of their existence”. He also states that this concept was related to the “antagonism between town and country” as well as with nature (Ibid). The rift was caused “by the creation of labour markets and the commodification of nature, and of land in particular,” adds Wittman (2009: 806). Clark and Foster (2010: 127) state that large-scale industrial agriculture and the development of distant markets have aggravated this rift. Wittman (2009: 808) refers to the disconnection between producers and consumers and the separation of agricultural production from natural processes as a form of distancing. These two examples create a clear opening to use metabolic rift as a mechanism for exploring the distance between producers and consumers in the current food system and the different ecological repercussions of localized and globalized models of agriculture.

The way metabolic rift is applied is still a matter of debate, however. Moore (2011: 2) challenges the use of metabolic rift as a simple binary that views capitalist development as the cause of environmental degradation and argues instead that capitalism and nature act upon each other, and furthermore that capitalism develops “through nature-society relations”. Ecological damage is not a side effect of capitalist accumulation but rather it is an intrinsic part of it. Moore’s claims go beyond the basics of metabolic rift. His core idea is that each ecological regime (a concept that resembles that of food regimes above) transforms capital accumulation and therefore, capitalism is constituted by ecological regimes (Ibid: 34). As part of a complex argument, Moore makes the point that there is a commodification tipping point where capitalist transformation has taken place and after which, “neither governing structures nor production systems nor the (newly transformed) forests, fields, households, and other ecologies can reproduce themselves *except through deepening participation in the circuits of capital on a world-scale*” (Ibid: 32, emphasis in original). This idea that capitalism recreates itself through its internal, yet contradictory, logics of capital accumulation and capitalization poses a significant challenge to the realization of alternative food systems. Moore’s expanded metabolic rift conceptualization both clarifies and complicates the discussion. These debates pose interesting perspectives through which to analyze the sectoral divide that localization seeks to address, the ecological consequences of different food systems and the relationship between localization and capitalism.

2.3 Methodology

Critical analysis informs the methodology of the paper. It utilizes a qualitative approach, which is reflected in the methods of data collection and analysis. A qualitative approach allows for the “cultural, everyday, and situated aspects of human thinking, learning, knowing, acting and ways of understanding ourselves as persons” (Kvale and Brinkman 2009: 12) and in this way adds a richness and experiential quality to the discussion of the current dominant global food system and its alternatives, providing avenues of insight that would be excluded by undertaking solely quantitative research. As outlined earlier in this chapter, the paper employs a number of analytical tools and approaches in order to analyze the various components under investigation. The research undertakes a macro-level analysis with the food system as its unit and draws on examples from the micro and meso levels. The macro-level nature of the analysis demanded a range of sources, which led to the use of primary data collected via interviews and secondary data such as existing case studies, international agency reports, and academic literature. The conviction that using primary data from only one location would limit the scope and usefulness of the research ruled out the possibility of conducting fieldwork.

Participant observation was an important method for this analysis. I have been active in the food sovereignty movement as both an elected representative of the National Farmers Union (NFU) in Canada and as a staff person. In these roles, I was present at key moments such as the World Trade

Organization protests in Cancun, Mexico in 2003 and the international Nyeleni Forum for Food Sovereignty in Selengue, Mali in 2007. These events and others like them have contributed significantly to my understanding of the way the global food system and its counter-movements interact. Interviewing selected key informants was vital to this research process in terms of sorting through the strengths and weaknesses of local food systems' framing within food sovereignty by those closest to it and in identifying many of the tensions and contradictions within the counter-movement. As well, the interviews provided first-hand accounts of localization efforts and evidence of the discourses used by localization and food sovereignty advocates. The key informants were selected using a purposive sampling method. This method relies on choosing the sample for its relevance rather than its representativeness (Schwandt 2007). Six of eleven key informants are farmers, one organizes farmworkers, and three are or have been LVC staff. At least three have also published academic works related to food sovereignty and one is my mother. As a researcher then, I am located somewhere along the spectrum of the "engaged" or "committed" positions outlined by Edelman (2009: 254-260). He acknowledges many tensions in this relationship but notes that one of the most useful contributions of academics connected to social movements is to ask the challenging questions (Ibid: 257), which I have tried to do here.

The interviews were conducted through online videoconferencing using Skype. Glassmeyer and Dibbs (2012: 296) note that online videoconference interviews have several advantages over telephone interviews including the ability for the researcher to observe non-verbal cues and maintain eye contact with the respondent. In this research the video element had mixed results, as a number of interviewees were only accessible by telephone and the video portion of Skype worked only intermittently. The interviews were recorded with software called Call Recorder and a back-up audio was recorded on a secondary device using SoundNote. An interview guide and an informed consent form (Appendix 2) was prepared ahead of time and circulated to the respondents.

3 Distance in the global industrial food system

This chapter will argue that the global industrial food system creates various forms of distance (understood as *space between* or *separation from*) and that these distances are both a product of that system and the way in which it perpetuates itself. Six forms of distance are elaborated here, roughly categorized as geographical distances, such as the distance food travels from field to plate, and sectoral distances, such as the alienation between rural and urban. There may be many other ways to understand the separation and distances intrinsic to the industrial food system but this chapter does not claim to be comprehensive. Instead, the exploration of these geographical and sectoral distances aims to show that distance is part of the logic of capital accumulation in the food system.

3.1 Geographical distance

Production and consumption

Perhaps the most obvious form of distance inherent in the global industrial food system is the geographic or physical distance between where food is produced and where it is consumed. The distance between production and consumption is a defining feature of the global industrial food system. Various studies have been conducted to track *food miles*, the distance food travels, to show the ecological impact of transporting food over long distances. One example is the Leopold Center for Sustainable Agriculture's 2001 study, which calculated that food from the "conventional national" food system traveled 1,546 miles on average to reach consumers in agriculture-rich Iowa, USA and released between five and seventeen times more carbon dioxide than food sourced from regional and local food systems (Pirog et al. 2001: 1-2). The report also notes that since World War II Iowa has produced mainly corn and soybeans, which leave the state for processing (Ibid: 6). The concept of food miles has been critiqued as an oversimplification that relies too heavily on isolating the consequences of transportation while neglecting to study the fossil fuels used in food production (local or otherwise) or other ecological effects of various farming methods (Mariola 2008). Nevertheless, food mile projects such as this one confirm that food is traveling long distances between harvest and grocery store shelves and that, even in food producing areas, there is a growing disconnect between production and consumption.

As outlined in Chapter 2, each food regime is defined by a particular arrangement of global commodity flows. These international commodity flows are an intrinsic part of the food regime and both pave the way for the industrialization of agriculture in each respective period at the same time as they are enabled by it. As Bernstein (2010: 66-67) notes, the first global food regime, which moved staple crops from the colonies to feed European industrialization, developed in concert with the construction of vast railway systems through formerly uncultivated land in the (mainly British) colonies. Agricultural production in these areas was developed precisely for export and consumption on a different continent. The second food regime reveals that the Green Revolution, with its new industrial methods and technologies such as hybrid high yielding seed varieties, chemical pesticides and fertilizers, and increased mechanization, alongside post-war price supports in the US created surplus production that fed into increasing global commodity flows (Friedmann 1992: 372). The trend continues in the current corporate food regime as livestock commodity chains become more globally integrated relying on Intensive Livestock Operation (ILO) production methods and commodity flows are prescribed by free trade agreements, further separating production and consumption (Holt-Gimenez and Shattuck 2011: 111; Weis 2010).

Friedmann identifies two key relations as elements of an unsustainable food system: the distance between production and consumption and the durability of food crops (Campbell 2009: 310; McMichael 2009a: 159). Her (1992: 375) formulation of durability includes the standardization of produce to be able to withstand mechanized harvest and long distance transportation,

as well as the growing substitution of newly developed sweeteners and additives (such as high fructose corn syrup) that have replaced imports from the global South. Distance and durability reinforce each other; the further food crops have to travel to reach consumers, the more durable they need to be and the more durable food crops are, the further they can travel to reach desired markets.

The point is not to argue that global commodity flows are the dominant mechanism of distributing food around the world. In fact, international commodity flows only constitute around fifteen percent of total food produced worldwide (Van der Ploeg 2010: 101; FAO 2012: 106). However, by looking at how food regimes have reshaped the relations between commodities, production methods and wider processes of capitalist development, it becomes clear that the industrial food system relies on and creates distance between production and consumption. “The dominant tendency is towards distance and durability, the suppression of particularities of time and place in both agriculture and diets. More rapidly and deeply than before, transnational agrifood capitals disconnect production from consumption and relink them through buying and selling” (Friedmann 1992: 379).

Distant markets

The global industrial food system literally and figuratively distances producers from markets. First, by distancing production from consumption it is inevitable that agricultural products will often be sold in a place far away from where they were grown. For example, Wendy Manson, who farms a conventional grain farm with her husband and extended family on the export-oriented Canadian prairies, sells most of her production to international grain companies rather than through local or regional markets or directly to buyers (W. Manson interview, 2 September 2012). The distance between the farm and the marketplace where her grain is eventually sold requires a chain of intermediaries from grain companies to commodity traders to supermarket chains. Uneven geographical development is partially an outcome of market relations with “innumerable points for the extraction of value and surplus value” that categorize the industrial food chain (Harvey 2006: 97).

Second, the globalization of markets translates into an abstraction whereby *the market* becomes an entity in itself rather than a space of transaction governed by the buyer and the seller. Edelman (2005: 332) argues that the move from market understood as a specific place to market understood as a metaphor or abstract space required distancing the economy from society and hiding the actors and institutions that shape economic transactions. Food is a commodity like any other commodity to this distant market. The market becomes an invisible force that shapes industrial production by determining commodity prices and relegating farmers to price-takers. Harvey’s (2006: 78) conception of material embeddedness, where he notes that all social processes take place somewhere, is useful here. While the workings of the intangible global agricultural commodities market are complex, even at its most abstract

the commodities market is dealing in concrete products like wheat and corn that have been grown in a particular place and will be consumed in a particular place. The consequences of this abstract market are also embedded in the material world. However, the increasing financialization of agriculture is the next step in the process of moving from what Italian organic farmer Andrea Ferrante calls a “real economy” to a “dream economy” (A. Ferrante interview, 2 September 2012). Burch and Lawrence (2009) contend that financial institutions are engaging in speculation and at the same time other corporate players in the food chain are acting more like financial institutions themselves and they argue that the corporate food regime is in fact a financialization food regime.

Finally, the answer to distant markets proposed by many international agencies is to further integrate farmers and peasants into the global market. Responses to the 2007/08 global food crisis showed this type of response even in the face of what was arguably an industrial food system failure. As prices spiked on international commodity markets, the price of basic food items rose dramatically. The price of rice increased by 166 percent between January 2007 and June 2008 (Rapsomanikis 2009: 3), becoming too expensive for those living in poverty and precarious situations and resulting in widespread protests in many parts of the world. This spike in prices did not translate into record profits for peasants, however, so international agencies refocused efforts to bring the global market to peasants so they can take advantage of future price increases (Van der Ploeg 2010: 99; World Bank 2008: 19). Whether or not this is useful strategy for dealing with distant markets is up for debate.

Peasants from their land

The dispossession of peasants from their land and the migration and displacement that results constitutes a third way of viewing geographical distance. Returning briefly to the discussion in Chapter 2 on peasant differentiation, it is important to clarify that dispossession by displacement, which is linked to migration is not simply a form of differentiation. Araghi (2012: 118) posits that these two are distinct. The establishment of British hegemony and the first food regime provides an example of both forms of dispossession occurring simultaneously but in different locations. England’s peasant differentiation during the eighteenth and nineteenth centuries where many peasants moved internally into industrial factory jobs in the cities relied on imported food and dispossession elsewhere in the world (Handy and Fehr 2010: 48-49). Li (2009) agrees that a form of dispossession leading to displacement and the creation of a “surplus population” exists. She argues that the surplus population is not always necessary as a labour force for capitalist expansion elsewhere and therefore, not all surplus labour created by dispossession is utilized for increasing capital accumulation. Li also contends that eviction of peasants from their land occurs precisely when their labour is not needed but their land is (Li 2011: 286). Du Toit (2004: 1002-1004) offers another useful construction when he identifies that poverty following dispossession can result from the ways in which people are *included* in the market through a process of “adverse incorporation”.

Araghi (2010: 120) argues that enclosure, privatization and dispossession are defining features of capitalism, not only in its infancy but also as a continuous operational logic. While it is important to note that it does not occur at every site of accumulation, dispossession is “a necessary condition for capitalism’s survival”, according to Harvey (2006: 91). For instance, the Mexican countryside was inundated with cheap food imports following structural adjustment policies in the 1980s and trade liberalization in the form of the North American Free Trade Agreement’s (NAFTA) beginning in the 1990s (Baker 2008: 236-238; Lind and Barham 2004: 56). Carlos Marentes, Director of Sin Fronteras Organizing Project on the Mexican-US border, the site of a major international migration, describes a global industrial food system irony faced by farmworkers in the US who used to be peasants in Mexico:

Since 1994, when NAFTA came into effect, more than 4 million peasants became landless. There’s a saying in Mexico that, you know, before NAFTA we were poor but at least we used to produce our own food. Now we are poor and we have to buy our own food. That was the destruction and terrible impact of NAFTA upon rural Mexico: more and more dependency by people from rural communities to cross the border, to come to the United States to work as farmworkers, picking fruits and vegetables in this country for very low wages, under bad working conditions to produce more food to send back south to destroy more rural communities (C. Marentes interview, 3 September 2012).

Dispossession does not only occur to those caught struggling against the imposition of cheap imports flooding their national and local markets, although Dominican farmer Amos Wiltshire struggles to compete with cheap carrots imported from Florida (A. Wiltshire interview, 3 November 2012). It also happens to those who engage and participate in the industrial food system that is eventually responsible for their dispossession. Du Toit (2004: 1003) states, “What defines marginality is not exclusion [...] but the terms and conditions of incorporation.” Watts (1994 :23-24) provides a analysis of contract farming and claims that it is one mechanism through which agriculture is integrated into globalization processes and as the practice moves to the global South it is drastically altering agricultural systems there. Participation is often forced by the search for higher yields to offset low prices or the consolidation of processors who prefer to contract production on their terms or the difficulty of unhooking from the industrial system once you are connected to it through inputs and other means. In Canada, farm debt increased two and a half times between 1988 and 2007 and more than ten percent of farms disappeared between 2006 and 2011 (StatsCan 2012; NFU 2007) despite Canadian farmers engaging wholeheartedly in the industrial food system – Canadian agri-food exports tripled between 1988, when Canada signed the first free trade agreement with the US, to 2007(NFU 2007). “We’re wrapped in it. As kids we were sort of sitting beside it. Occasionally, every year you dumped a bunch of grain into it but this thing is... you’re wrapped in it,” says Manson of the increased inclusion in the global industrial food system over the course of one generation (W. Manson interview, 2 September 2012).

3.2 Sectoral distance

Producer and consumer

A distance is created between producers and consumers when consumers are detached from those who produce their food and from the processes involved in production and processing, as the metabolic rift suggests. This divide is produced, in part, by the commodification of food, which “creates an abstract and disembodied notion of food” (Jacobsen 2004: 67). Commodification occurs through standardization, processing and distribution of food on the global scale. It is managed by large food retailers, processors, and distributors, which are increasingly consolidated into fewer and fewer corporations, and through international trade regimes such as the WTO (Ibid: 67-68). Transforming food into a commodity is necessary for the functioning of the industrial food system as disembedding food from its social, cultural, geographic and ecological aspects allows food to be vastly exchangeable and severely altered from its original state (Ibid; Campbell 2009: 310). A grocery chain that easily exchanges lettuce sourced from one place with less expensive lettuce from an entirely different continent because they cannot be distinguished is a simple example of exchangeability. Commodification of food and the processes that have enabled it conceal the producers (and the production processes, maintains Campbell 2009: 111) from consumers. Lind and Barham (2004: 49) show through the example of tortillas, however, that food “moves in and out of the commodity state”.

The construction of *consumer* as a role within society places limits on the agency of citizens who purchase rather than grow their food. It turns citizens into merely shoppers rather than political, active agents in the food system. Consumers are then restricted to act through their purchasing power alone. The “individualization of responsibility” outlined by Maniates (2001) in reference to the current trend of green consumerism is a useful construction in the food system as well. He notes that the individualization of responsibility reinforces existing patterns of production and consumption and can be partially blamed on “the dynamic ability of capitalism to commodify dissent” (Ibid: 33). While this delineation of *consumer* does not innately preclude a relationship with *producer*, by defining citizens as consumers and effectively limiting their realm of choice to within the available options for purchase, the global industrial food system reinforces the dynamic of separation.

“From farmers to consumers, all social actors and agencies involved in these processes [of commodification and globalization] are separated from each other not only spatially and temporally, but by their functionally different interests,” write Koc and Dahlberg (1999: 112). This statement both reinforces the idea of distance between producers and consumers and raises the question of the validity of categorizing producers as one entity and consumers as another. The class critique here is important – not all producers have the same access to productive resources just as not all consumers have the same purchasing power. Categorizing producers and consumers separately also negates the reality that producers are consumers too and are often food buyers. For example, the majority of farmer key informants participate in the food

system as food buyers as well as food producers, to varying degrees. The categorization also assumes that urban people are consumers and rural people are producers. This is particularly problematic in the global South where the sharp separation between producer and consumer is not an accurate separation between rural and urban. Approximately one quarter of the one billion rural poor around the world are not involved in agriculture or related activities (IFAD 2011: 7). The aim to eliminate rural poverty through increased commodity prices and better access to markets, mentioned above, assumes that the rural poor have agricultural products to sell rather than that they are net food buyers.

Rural and urban

Is the rural-urban divide merely a construct used by proponents of urban bias theory to suggest that urban areas are unfairly determining the fate of rural areas and benefiting at their expense? While urban bias theory has been heavily critiqued on a number of fronts (discussed in Chapter 2), there is a case to be made for the existence of a gap between rural and urban sectors of society. Of the 1.4 billion extremely poor people in the world today, one billion of them live in rural areas (IFAD 2011: 7). This figure alone illustrates a discrepancy between rural and urban sectors. Rural communities dependent on agriculture face unique challenges stemming from economic uncertainty, out migration, urbanization, and the loss or underdevelopment of vital services such as healthcare yet at the same time they are the recipients of huge subsidies in the North and the focus of poverty reduction strategies in the South. It is imprudent to attribute these challenges and contradictions unequivocally to capitalist development; however, processes of capital accumulation have contributed in substantial ways to the decline and differentiation of rural communities in both the North and South and exacerbated the rural-urban divide.

The relationship between the rural sector and urban sector is complex and any broad generalizations are ripe for critique. Definitions of rural and urban may be fluid as rural people migrate to cities to find work and urban people move into rural areas in search of affordable housing or different lifestyles. Different countries determine the definition of *urban* based on vastly different population thresholds (UN Statistics Division 2012; Tacoli 1998: 4) and rigid definitions of rural and urban negate the peri-urban and small town spaces between farm and metropolis and the flows of goods, services and people that exist between them (von Braun 2007: 1-3; Kay 2009: 122). It is also important to note that neither rural nor urban areas are homogenous in their activities, inhabitants or attitudes.

In their analysis of the metabolic rift, Clark and Foster (2010:127) place the origin of distance between rural and urban at the initial stages of capitalism when the privatization of land and resulting displacement led to urbanization. The process of primitive accumulation followed by the establishment of capitalist accumulation patterns created a separation between rural and urban through the urbanization process at the same time as relations between society

and nature were rearranged (see next section). Rural and urban distancing is also linked to historical and contemporary arguments about prioritizing industry over agriculture – industry typically associated with urban areas and agriculture, not surprisingly, with rural areas. These debates are intimately connected to directions and strategies of development. Questions of how much surplus could be extracted from agriculture to fuel industrial development or how industrial development would encourage agricultural productivity, for example, were important considerations in development discourse (Kay 2009: 105-107). Without disregarding the reality of adverse rural conditions, Kay (2009: 113) asserts that the cause is not an urban bias but rather it is the unequal distribution of productive assets in rural areas and agricultural productivity that is lower than industrial productivity. He suggests that to bridge the rural-urban divide, development strategies need to focus on synergies and interactions between the two sectors (Ibid: 115).

Agriculture and nature

The separation of agriculture from natural processes is the basis of the metabolic rift (Foster 1999; Moore 2011; Clark and Foster 2009; Wittman 2009). Nature and society are disconnected through the commodification and exploitation necessitated by capital accumulation (Wittman 2009: 806). Accumulation imperatives, rooted in the need for continuous expansion and growth, depend on the manipulation of nature in a variety of forms and on the extraction of value from natural resources (Clark and Foster 2009: 312; Harvey 2006: 91-92). Clark and Foster (2009: 315) outline Marx's contention that capital accumulation necessitates the industrialization of agriculture in order to extract surpluses for the market and that a rift was created by mining nutrients that ultimately ended up in the cities as waste rather than being reincorporated into the soil. As agriculture becomes more industrialized, the rift between nature and society widens. In the first food regime, agricultural industrialization was characterized by commercial commodity production, increased mechanization, privatization of land, and the expansion of "ecological exploitation" outside Europe (Ibid: 312; Friedmann and McMichael 1989: 101). During the second food regime, synthetic chemicals and fertilizers were incorporated to increase production and to counter the effects of nutrient deficient soils, which had been identified as an issue as early as the 1890s (Smil 1997: 78).

The current food regime follows the same logic of expansion, industrialization and separation of food systems from their ecological base. Green Revolution technologies have moved from the North to become part of agricultural systems in the South; for example, nitrogen fertilizer used in the South comprised around 60 percent of global usage in the late 1990s (Smil 1997: 79). Ferrante reasons that these technologies link farmers to a particular model of production connected to corporate power and based on the notion of control over natural cycles (A. Ferrante interview, ?? September 2012) and Wiebe argues that industrial agriculture is now entirely focused on surplus extraction and productivism rather than ecology or culture (N. Wiebe interview, 1 September 2012). The use of fossil fuels, new technologies such as

genetically modified seeds, and the intensification of livestock production – linked to what Weis (2010: 317) terms “an expanding ecological hoofprint”, constitute a spiral that reinforces itself requiring more and more investment in industrial methods to maintain production increases and perpetual accumulation. “Instead of being built on ecological capital, farming has become dependent upon industrial and financial capital,” writes van der Ploeg (2010: 100). Agriculture has come loose from its ecological foundations in a process of constant and chronic distancing.

Moore’s (2011) critique of Clark, Foster and others is that they utilize the metabolic rift to argue that capitalism results in ecological destruction and degradation, which narrows the realm of exploration rather than allowing for a deeper analysis of the dialectic relationship where capitalism develops through the relations *between* nature and society. An interesting aspect of Moore’s interpretation is that he situates society within nature rather than putting nature in one category and society in another. He argues that nature has become dependent on circuits of capital such as finance capital, which are ostensibly free from material commodity production (Ibid: 14). While Harvey (2006: 87-89) refers to the “production of nature through capitalistic activities”, his foray into the metabolic dialectic in his theory of uneven geographical development is confined to a brief but appealing discussion of how society transforms the environment and how that, in turn, transforms society. More relevant to Moore’s take on nature-society relations is Harvey’s explanation of how capital accumulation innately seeks to speed up production, distribution and consumption to reduce the costs associated with distance (Ibid: 100). Moore provides a list of examples such as accelerating the time it takes to grow chickens and speeding up milk production in cows through the use of hormones (Moore 2011: 14). This endeavor to overcome space and time is reliant on the type of capital that itself is delinked from materiality. While the limitations of distance are tackled this logic of accumulation, in another sense, the distance between agriculture and natural systems is aggravated. By accepting Moore’s framing of nature-society relations and the premise that nature is also acting on capitalism, it is still possible to assert that the logic of capital accumulation within this relationship has fundamentally altered the link between agriculture and nature.

4 Situating food sovereignty & local food systems

This chapter will argue that local food initiatives connected to or reliant on the industrial food system either in terms of production methods, scale or accumulation logic are unlikely to present a real challenge to the global industrial food system and instead act as a niche within the system. Local food systems based on food sovereignty are more capable of challenging the current industrial system because they call for radical transformation beyond building or sustaining local food production, distribution and consumption and they attempt to work outside the capitalist logic. However, most local food system initiatives fall somewhere on the spectrum between the two extremes and food sovereignty-based local food systems are often not yet well defined. Examining

how much attention is paid to food sovereignty's other tenets and the wider context informing the kinds of claims and demands food sovereignty makes are imperative in determining the effectiveness of local food systems in countering the dominant global industrial model and addressing the distances caused by the logic of capital accumulation in the industrial food system.

4.1 Food sovereignty and local food systems

Food sovereignty began as the international peasant movement, La Via Campesina's main proposal for a radically different global food and agriculture regime. Within the early framing of food sovereignty, synthesized by Desmarais (2007: 34) from 1996 to 2000, local food systems are not explicitly discussed although the core notions of defining food and agriculture policy at a national or local level, asserting the right of peasants to exist and produce food, rejecting the industrialization of agriculture and prioritizing domestic markets wave at a strategy of localizing food systems. The 2007 Nyeleni Forum for Food Sovereignty in Mali overtly identified local food systems as a key aspect of food sovereignty. Both the definition of food sovereignty in the final declaration of Nyeleni and the six key pillars of food sovereignty outlined in the synthesis report refer to food systems shaped by local producers, the need to focus on local markets and the development of local food strategies as crucial pieces of realizing food sovereignty (Nyeleni 2007a and Nyeleni 2007b). The key informants for this research agreed that building and sustaining local food systems was a significant component in the food sovereignty approach, yet the movement for food sovereignty has not elaborated local food systems beyond general statements and, as Patel (2009) reveals, the definitions of food sovereignty itself are diverse, contradictory and in motion.

A brief look at the way transnational agrarian movements (TAMs) like LVC are formed and operate provides clues as to why the food sovereignty vision of local food systems remains vague. Borrás, Edelman and Kay (2008) attribute the generalizing tendency of TAMs to the complexity of representation. They argue that movement leaders inevitably simplify issues and stances "to make complex realities legible [...] and manageable" (Ibid: 186). Claims of representation are necessary for movements to have weight behind their proposals and demands but these claims are far from straightforward. The authors encapsulate the challenges of representation along three themes: First, most TAMs are built on partial rather than full representation of a specific constituency and the degree of actual representation (as opposed to the claim of full representation often invoked to bolster authority) corresponds to the credibility and strength of the organization or movement. Second, representation is continuously shifting and movements go through cycles where they are more or less equipped to represent their constituencies. Finally, by claiming to represent a particular group all those who do not identify with the group are left out and their claims are not articulated by the movement, which has implications for the kinds of demands and the focus of the propositions made by TAMs (Ibid: 182-186).

The last point is particularly interesting in light of the critique by Bernstein (2010: 120-122) that LVC and other TAMs identifying through the moniker *people of the land* assume a class homogeneity that does not exist within and between the organizations that comprise the movement. Borras (2010: 775, 783) concurs that LVC and others are comprised of actors that have a diversity of class interests that can overlap or contradict each other, as illustrated through LVC whose members support redistributive land reform (like the MST, the landless workers' movement in Brazil) and oppose it (like the KRRS a organization encompassing wealthier landowning farmers in India). A valuable contribution to understanding how issues and strategies are framed by LVC is Borras' (2010: 779, 783) contention that LVC is both an actor on the international stage (and national and subnational stages via its member organizations) and at the same time it is an "arena of action", a contested, dynamic internal space where positions and actions are debated, tested and negotiated. From both ends then, LVC is limiting its representation. By excluding rural poor who may be net-food buyers, for instance, or rural actors in certain regions of the world (China is one example posed by Borras) and by either glossing over internal class divisions or reconciling them issue by issue rather than comprehensively, the articulation of food sovereignty and local food systems by LVC and others necessarily overlooks many intricate details and leaves vital questions unresolved.

Broadly, the food sovereignty framework views local food systems as ideally embedded in small-scale, peasant production using agroecological methods, but more recently it also acknowledges a wider variety of food producers such as fisherfolk and pastoralists (Nyeleni 2007b), although these other actors remain less prominent. The discourse also recognizes that a diversity of local food systems and local food initiatives will be present in different places. Food sovereignty seeks to move control over food systems to the local level and by its very nature then, each local food system will demonstrate different characteristics and privilege some dimensions over others (Nyeleni 2007b: 1). Local food systems are dynamic and evolve as they develop and in this way, may demonstrate changing characteristics over time, reflecting Harvey's (2006: 76) portrayal of dialectics as constant movement between the universal and the particular, the theory and the practice. Unpacking the wide variety of local food systems by differentiating the scale, method and character of these initiatives (examined in the next section) forms the basis from which to answer the question of how and to what extent food sovereignty addresses the various distances in the global industrial food system.

However, it is also important to note that isolating the local food system aspect of food sovereignty from its whole weakens food sovereignty's ability to challenge the corporate food regime. Wittman, Desmarais and Wiebe (2010: 4-5) contend that food sovereignty goes well beyond rearranging global food relations, although that is at its core, to provide an alternative model of rural development. Giving credence to the possibility that food sovereignty exposes "different concepts of modernity" (Desmarais 2007: 39), Patel (2009: 670-671) argues that fundamentally food sovereignty attempts to address deep-seated, long-standing power inequalities to achieve a "radical egalitarianism". Patel's

theorizing of food sovereignty demonstrates the breadth of what is required to achieve it – including the transformation of power structures and social relations resulting in the elimination of “sexism, patriarchy, racism, and class power” (Ibid). Reducing food sovereignty to local food systems mirrors the reductionist tendencies of the global industrial food system and therefore recreates the principles it seeks to resist. If the elements of food sovereignty are compartmentalized and dealt with separately, the transformative potential of the framework is compromised and there is a risk that the theoretical breadth of food sovereignty is lost in the concrete practice of one element. On their own, local food systems are not sufficient to challenge the global industrial food system and a local food system, even one meeting the ideal food sovereignty type, does not constitute food sovereignty (A. Desmarais interview, 9 September 2012).

On the other hand, transformation of social relations, the food system and rural development trajectories is not possible without being grounded in the practice of food sovereignty, which is made more difficult by its breadth and resistance to simplified definition. Even if small-scale, agroecological peasant production or some nearby variant is forming a local food system, if the other aspects of food sovereignty such as gender equality and social justice are not present, is it food sovereignty? Key informants had differing opinions on the question of whether or not local food initiatives that did not adhere to the larger political program were still part of building food sovereignty. Some believed that any work that was moving food system dynamics toward local or alternative models was usefully contributing to food sovereignty’s vision of challenging and changing the capitalist industrial model, even if only to prepare the ground. Others were adamant that there are many examples of local food systems that are not food sovereignty, for example local food initiatives that are not controlled by farmers, that use genetically modified seeds or chemical inputs or are based on large monocultures. The next section will focus on differentiating local food systems in an attempt to tease out what constitutes local food systems based in food sovereignty and to explore the nuances, tensions and paradoxes that have yet to be solved in the articulation of food sovereignty.

4.2 Local differentiated

The definition of *local food system* is subjective, contested and dynamic (briefly discussed in Chapter 1). On one hand, the strength of local food systems is that they are based in the particular rather than the universal and that they can be defined in a variety of ways that appropriately suit each context. On the other hand, the possibility of usefully generalizing the meanings and outcomes of local food systems is made more complex by the lack of a single clear definition. Such categorization is not irrelevant, however, though it may be imprecise. Not all forms of local are synonymous and this ambiguity of definition means that to determine the extent to which local food systems are capable of countering distance, it is necessary to analyze their characteristics and broadly classify them along a range where local food systems within the food sovereignty framework occupy one end and local food systems within the

industrial capitalist framework the other. It is important to note that the individual treatment of scale, method and character here is an artificial one for analytical purposes. In practice, each of these elements of local food systems are overlapped and intertwined.

Scale

Can industrial production and food sovereignty be distinguished in terms of scale? What scale do local food systems occupy? While it is often assumed that food system localization implies small-scale agriculture, differentiating between different scales of production and distribution, in relation to the method and character of production, assists in distinguishing broad types of local food initiatives. Differentiating local food systems according to scale is dependent on defining scale. In a review of geography and political ecology literature regarding scale, Neumann (2009) observes that often the conceptualization of scale is itself ambiguous, alternating between referring to *size, level, network, or site*. Neumann (2009: 405-406) advocates for choosing one consistent meaning of scale, but both scale as size and scale as level are used here for the purposes of analyzing local food systems.

Scale as size is often invoked in relation to food production. Neumann uses the example of large-scale as interchangeably meaning “capital intensive, spatially extensive, or national” (Ibid: 404). For example, small-scale agriculture is frequently defined in opposition to large-scale agriculture based on the amount of land cultivated, yet Bernstein (2010: 93) contends that capital intensiveness is a more useful descriptor since farm area does not indicate the number of farm labourers needed or the capital required to start and maintain the operation, essential relations in capitalist farming. While admitting the imprecision of the classification, industrial agriculture features increasing farm size related to mechanization and the use of inputs as well as increasing capitalization, particularly in the current corporate food regime where corporate investment into the production side of the food system is becoming more commonplace (Van der Ploeg 2010: 100; Burch and Lawrence 2009: 271). Large-scale, meaning capital-intensive agricultural operations with large land area or a high number of animals, can be used as a synonym for industrial agriculture (D’Souza and Ikerd 1996: 73). In fact, van der Ploeg (2010: 100) calls increasing scale an “indispensable ingredient of industrialization”. Linking large-scale to industrial production does not preclude the sale of industrial production within a local food system, although large-scale production typified by industrial methods is likely to be connected into larger distribution networks and more distant markets, as is illustrated through the three food regimes and their respective global commodity flows.

The most important and long-standing debate in this arena relates to scale versus productivity. Are large-scale industrialized farms more productive than small-scale peasant ones? One side of the debate hinges on the notion that productivity is increased through the use of agricultural technologies and economies of scale. This position was advanced by Lenin, Kautsky and others to argue that increases in scale led to increases in productivity, which would

eventually result in decreases in the amount of land needed for capitalist production (Akram-Lodhi and Kay 2010: 190-191). Modernization in agriculture was intimately connected to increased productivity and integrating farmers into commodity relations (Bernstein 2010: 74-75). Chayanov advocated for a variety of scales of production, defined by farm size, because he believed in “differential optimums”, the idea that different crops were better suited to different scales of production (Shanin 2009: 88). A more contemporary version of this argument is that to produce enough food to feed the global population, industrial methods are necessary and as these methods lead to increased scale, as noted above, therefore large-scale production is required to address hunger (Smil 1997: 81). Altieri and Nicholls (2008:474) make the counter argument that small-scale, integrated farms produce more total output than large-scale monocrops. Van der Ploeg (2010: 100) acknowledges that capitalist industrial agriculture is responsible for “considerable productivity growth” but he tempers it by suggesting that this type of growth leads to “a long-term decay in biophysical productivity”. Woodhouse (2010) outlines that small-scale production is more energy-efficient but large-scale production continues to have higher labour productivity. Food sovereignty is rooted in small-scale farms. LVC claims that they are more productive than large-scale (LVC 2010) and in this way takes one side of the argument while capitalist agriculture takes the other.

Scale as level is also a useful conceptualization. Rosset (P. Rosset interview, 3 September 2012) understands local as a “nested concept” with many levels. The lower down the scale or closer to the household level a food system is, the more local it is. In this version of scale, small-scale means producing for a household or a market within the community and large-scale means producing for levels further up the scalar chain, such as international markets. The further down the local scale a food system is, the shorter the supply chain is so using this framing, a farmers market where farmers are directly selling to customers is more local than a large grocery chain offering regional produce. Manson says, “Time and geography and [...] ease prescribe or define my local food system. The most convenient food for me is when, at twenty to twelve, I wonder if there are still green beans in the garden” (W. Manson interview, 2 September 2012). The more nested local food systems are, the more able they should be to bridge the metabolic rift, both literally and metaphorically.

This relation of scale as level is not always straightforward in practice, particularly as efforts to build local food systems grapple with questions of how to scale-up these initiatives without losing focus on maintaining the embeddedness of these food systems and what the implications are for local food systems as they are broadened out to include more consumers and larger geographical areas. Friedmann (2007) relates the case in Toronto, Canada of public procurement of local food as a mechanism for shortening supply chains through utilizing a third party certifying body as the link between corporate food suppliers and local farmers. She contends that this is a successful case of increasing the scale of local food systems (Ibid: 389), yet in the process of scaling up the direct linkage between producer and consumer is unavoidably a

few steps removed. Scaling up localization can be problematic for retaining social and environmental benchmarks in local food systems, Wittman et al. (2012: 38) note in their study of farmers' markets in western Canada, and at the same time, local food systems need to reach a large number of consumers in order to challenge the industrial food system.

Method

The methods used to produce and distribute local food afford another lens of differentiation between food sovereignty and industrial capitalist agriculture on the spectrum of food system localization. The most blunt differentiation is between conventional production, which uses chemicals and synthetic fertilizers and is therefore directly connected to the corporate food regime and industrial agriculture through inputs and technology, and what can be termed traditional production. Traditional production methods, such as organic agriculture may be more closely linked with food sovereignty's aspirations of ecological health, although these are not automatically connected to the other facets of scale or character within the food sovereignty framework. Agroecological methods, on the other hand, more readily fit into the food sovereignty vision for local food systems.

Conventional production methods use a range of technical and synthetic interventions to increase productivity and control weeds and pests and though widely adopted on large-scale farms in the global North, they are not confined there. Many small-scale peasant farms from Mozambique to Dominica have also been hooked into conventional methods following the introduction of Green Revolution technologies (D. Nhampossa interview, 26 October 2012; A. Wiltshire interview, 3 November 2012). Organizations like AGRA sponsor programs to distribute hybrid seeds to small-scale farmers (AGRA 2012). Friedmann's (1992) observation that conventional methods rely on the practice of monocropping to ensure uniformity and durability and to exploit mechanization has also been adopted more recently in the organic sector, blurring the lines between industrial and peasant agricultural systems in this respect. Altieri and Nicholls (2003: 34) note that the organic movement was initially based on the idea of small-scale, locally based, ecologically-friendly agriculture but that as organic food became more desirable, particularly for upper class consumers in the global North, the organic sector (or parts of it) now resembles the conventional commercial sector including consolidated distribution networks, large-scale monocrop production, standardization and a heavy reliance on fossil fuels. Nettie Wiebe noted that transitioning to organic methods on her farm did not detach their production from fossil fuels or attach them to local markets (N. Wiebe interview, 1 September 2012). Altieri and Nicholls (2003: 34-36) contend that organic certification that does not address size or what they term "social standards" has resulted in similar arrangements and working conditions on organic farms as on conventional farms.

Local food initiatives established with agroecological production methods fall more fully within the food sovereignty model. As Nelson Mudzingwa, a

small-scale farmer in Zimbabwe, observed though, sometimes agroecological methods are adopted due to economic hardships that force farmers to relearn traditional methods in lieu of purchasing inputs. But in Zimbabwe, as in other parts of the world, agroecology is promoted by farmers' organizations, non-governmental organizations and others (N. Mudzingwa interview, 25 October 2012). Agroecology is based on enhancing small-scale farm productivity while conserving ecological resources through engagement in deeply rooted traditional practices and scientific knowledge of ecological processes (Altieri and Nicholls 2008: 476). Rosset et al. (2011: 163) summarize agroecology as a set of principles that include soil conservation and soil building, recycling of nutrients, polycropping and biodiversity preservation, and the use of biological mechanisms for pest control.

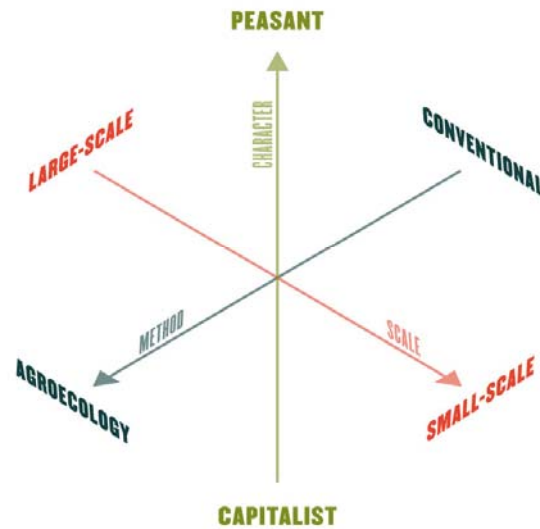
Character

Harvey (2006: 92) argues that the drive to accumulate surpluses results in appropriation, through the process of commodification, of material objects and abstract ideas ("creativity" for instance) that are not generated by capital. He uses the example of culture and writes that accumulation logic "creates a premium on the commodification of phenomena that are in other respects unique, authentic and therefore non-replicable" (Ibid). In many ways, this explanation provides insights into the multiple manifestations of local food systems, which due to their locality are at first glance "unique and non-replicable". Dominant players in the industrial food system capture alternative food system concepts quickly and turn them into marketable labels "as branded, profit-generating drivers of new investment" (Campbell 2009: 316; A. Ferrante interview, 2 September 2012; H. Moore interview, 6 September 2012). This points to a heightened obscurity in situating local food initiatives, as large corporate players appropriate labels created by alternative food movements to distinguish themselves from the mainstream food system. "It may feel like at certain moments that the industrial food system is offering some local food alternatives but I would say it's illusory. It's an illusion", states Rosset (P. Rosset interview, 3 September 2012). Campbell's "Food from Somewhere" represents these local food system initiatives that are connected to and extend out from the corporate food regime. He cautions that "Food from Somewhere" should not be entirely dismissed as it represents "a small but important set of counter-logics" (Campbell 2009: 318).

Accumulation by appropriation also confirms that the character of local food production and distribution is an important element of differentiation since labels alone do not distinguish real alternatives from niches subsumed in the corporate food regime. It can be argued that at the heart of the character differentiation between the two veins of localizing food systems is the tension between agrarianism and industrialism. "The fundamental difference between industrialism and agrarianism is this: whereas industrialism is a way of thought based on monetary capital and technology, agrarianism is a way of thought based on land," writes Berry (2002: 42). Kay (2009: 106), in laying out the historical treatment of this dualism, notes that the model articulated by Sir Arthur Lewis in the mid-1950s provided room for both a modern and

traditional sector within agriculture. In a simple binary, food sovereignty based in small-scale, agroecological peasant production parallels this notion of agrarianism and industrial capitalist agriculture based in large-scale, conventional or sometimes organic industrial production parallels industrialism. This dichotomy can also be viewed through the typology created by Holt-Gimenez and Shattuck (2011) that places alternative visions for the food system on a continuum from neoliberal and reformist elements in the corporate food regime to progressive and radical elements within food movements. Friedmann and McNair (2008: 427) offer a nuanced position when they argue that regionally organized bottom-up certification strategies have the potential to transform the global food system over time by uniting the local and global therefore falling somewhere in the middle of the continuum. Key to this differentiation are the arguments presented in Chapter 2 regarding the existence of peasants and the character of peasant production as substantially different than the character of capitalist production. This is, of course, an unresolved debate that largely depends once again on how *peasant* is defined.

FIGURE 1. Differentiating local food systems.



Source: Author's own diagram.
Graphic design: Aylwin Lo.

Figure 1 above presents a three-dimensional way to visualize the complexity of differentiating local food systems. Attempts to differentiate various forms of

local can benefit from these explorations of scale, method and character although they do not lead to a convenient and simple binary that large-scale, convention, capitalist production in all its iterations is equivalent to an industrial capitalist model (furthest bottom octant) and small-scale, agroecological, peasant production is equivalent to the food sovereignty model (nearest top octant). Rather, what emerges is a gradient where larger-scale is more likely to coincide with industrial methods and capitalist character and small-scale is more likely to coincide with ecological methods and peasant character. In reality, most local food system initiatives have characteristics that are situated somewhere along the three axis of scale, character and method. Farmers markets may rely on relatively small-scale peasant production from farms using nitrogen fertilizers or other inputs, like the local market where Wiltshire sells excess production in Dominica. Public procurement initiatives may require certified organic food but not specify the scale of production. Community-Supported Agriculture (CSA) initiatives may use agroecological methods on small-scale farms but hire wage labourers in the busy season, as is the case on Hilary Moore's farm.

5 How does food sovereignty address distance?

5.1 Conclusions and arguments

How does food sovereignty, and in particular its element of local food systems, address the geographical and sectoral distances in the global industrial food system? In order to answer this question, systematic steps needed to be taken. First, it has been argued here that distance, though viewed differently by different perspectives, is an inherent feature of the current global industrial food system. Second, it has been illustrated that not all local food systems are a manifestation of food sovereignty or even operate as alternatives to the corporate food regime. Yet neither can they be unequivocally categorized as part of the capitalist industrial model, in practice most local food initiatives fall somewhere in between the two archetypes. Third, it has been argued that food sovereignty is more capable of offering an alternative vision for the food system if its tenet of food system localization is not isolated from its other aspects. Food sovereignty provides an alternative, both politically and practically but its demands are mediated through both the nature of the capitalist system and corporate food regime in which it exists and by the dynamics intrinsic to transnational agrarian movements that have to reconcile diverse positions and the voices of many actors. All of these factors mean that while food sovereignty moves toward addressing the distances in the global industrial food system in a variety of ways, some questions remain unresolved by the current theory and practice of food sovereignty. Below is an exploration of how food sovereignty deals with the forms of distance elaborated in this paper and an outline of remaining questions.

5.2 Food Sovereignty Deals with Distance

In the context of a corporate food regime arranged around market principles arbitrated by international institutions like the WTO and favouring industrial agriculture and corporate supply chains, food sovereignty appears as both a contradiction and a proposal for reorienting food and agriculture (McMichael 2009b). The food regime lens, like food sovereignty, “brings food to the political center, not simply as a relation of consumption, but also as a relation of cultural production and social reproduction,” states McMichael (2009b: 293). The location of food sovereignty as a counter-movement to the corporate food regime and its particular logic of capital accumulation is mediated by the nature of TAMs and the various strengths, such as making political space on the world stage, and weaknesses, such as relying on broad conceptualizations rather than intricate details, that comes with the terrain (Borras et al. 2008: 186, 190). Therefore, it is worthwhile to briefly analyze the techniques and effectiveness of food sovereignty and its attendant local food system strategy to counteract the various forms of distance outlined in Chapter 3, as the ability of food sovereignty to respond to the global industrial food system in a concrete, systematic way is uncertain and Moore’s (2011: 32) claim of a commodification tipping point beyond which production systems can only reproduce themselves by becoming further entrenched in capitalist processes looms large.

Production and consumption – Locality and seasonality are cited as responses to features of geographical distancing in the industrial food system and in this way, localization is proposed as an oppositional force to distance and durability (Friedmann 1992: 380; Friedmann 1993 as cited in Campbell 2009: 310). Definitions of what constitutes a local area vary widely as illustrated by the 2010 ERS report on local food systems in the US, which found that local radius was defined by population density, state or county boundaries, or distance between consumers or producers and the markets where they respectively buy or sell food (Martinez et al. 2010: 3-4). The report also determined that in the US the majority of farms producing for local markets are small (defined as less than US\$50,000 in annual sales) and that vegetable and fruit production accounts for the majority of direct sales (Martinez et al. 2010: 18-20). Local food systems based in food sovereignty reduce the distance between production and consumption but this holds true for virtually any type of local food system. The question that remains is how much consumption (and of what kinds of food) is captured by local food systems?

Distant markets – The food sovereignty framework does not preclude trade, although it promotes the removal of corporate control, free trade agreements and the flooding of domestic markets with below cost of production food from global circuits of trade and calls for agriculture to be taken out of the purview of the WTO (Nyeleni 2007a). Baker (2008: 249), through two Mexican case studies that connect conservation of maize varieties and rural development strategies, concludes that attempts at localization occur within the context of wider processes, which inevitably influence their effectiveness and reach. This remains a challenge for food sovereignty since it does not operate outside the context of a dominant global paradigm even as it seeks to change it.

However, by pursuing primarily domestic and local markets and by seeking to ground market relations, put food producers at the center and nutritional needs ahead of the market, food sovereignty goes further than other forms of local food systems in countering the logic of accumulation and the abstraction of markets (Allen and Wilson 2008: 537).

In practice though, local markets do not automatically encompass these values. Local food systems undertake a variety of direct marketing strategies from farmers' markets and farm gate sales to food box programs and CSAs, where customers buy in to the risks of the farm at the beginning of the growing season and in return received fresh produce throughout the harvest (Feagan 2008: 161-162). Perhaps the most common form of local marketing worldwide are farmers' markets, which have been critiqued by Hinrichs (2000) as recreating commodity relations despite higher levels of social embeddedness than conventional markets. Hinrichs posits that CSAs are more likely to breakdown the commodity relations of conventional markets and create "an alternative *to the market*" (Ibid: 295; emphasis in original), yet the CSA model is largely a Northern one and begs the question of the mechanics of food sovereignty marketing in the global South and to what extent farmers' markets can resist the accumulation imperatives and commodification tendencies of capitalist market relations in order to bridge distant markets and maintain their peasant character.

Peasants from their land – The strength of food sovereignty, and its aim of localizing food systems, is the defence of small-scale, peasant livelihoods and the possibility of maintaining and strengthening rural communities and nature-society relations based on local food system arrangements. To increase resilience against processes of dispossession, food sovereignty claims local control over food systems. The process of localizing food systems has a more tenuous connection to peasants who are already dispossessed, however.

The dispossessed may be adversely incorporated (Du Toit 2004) into the global food system where they are marginalized and exploited, for example as migrant labourers on highly industrialized, single commodity-driven farms or as contract farmers integrated into corporate production systems. Dispossession and the resulting displacement or adverse incorporation weakens peasant organizations and makes it more difficult for them to claim representation and have authority in demand making. This is illustrated by Edelman's (2008) analysis of the rise and fall of Central America's transnational peasant alliance, which struggled to maintain its unity and strength in a context of deteriorating opportunities for small-scale peasants, increasing out-migration and other significant changes in the countryside. "[M]igration frequently undermines the capacity for political action," contends Edelman (2008: 249). Borras et al. (2008: 185) reference a "persistent and troubling divide" between escalating migration and the lack of representation and focus on migrant labourers by LVC and other TAMs. Marentes offered, "I think that if we want to build a strong farmers movement to push for food sovereignty its very important that we bring the farmworkers to our side. After all, they are the farmers; they are the peasants of the South. And we are moving in that direction, with lots of difficulty [...]" (C. Marentes interview, 3 September

2010). Some of the difficulty may be attributed to the different class positions of small-scale farmers and farmworkers, as Bernstein (2010) asserts.

Producers and consumers – Local food movements tackle the distance between producers and consumers, aggravated by the commodification of food and the geographic distances elaborated above, through direct marketing and the social re-embedding of food systems. Hinrichs (2000: 297; 2003: 36) asks difficult questions about who benefits in these local food transactions, however, and warns that social embeddedness is often taken for granted and generalized when it should be assessed more vigorously. Local food movements may heighten distancing through their “missionary impulses”, according to Guthman’s (2008: 395) scathing critique of local food system practices in the US as racially marginalizing and exclusionary. She points to romanticized, white-centric discourses that alienate and misconstrue histories of food (Ibid: 394). Allen and Wilson (2008: 537) suggest that many local food initiatives may reinforce existing inequalities of race and class rather than challenging them due to the focus on consumer choice that ignores historically constructed inequalities. They posit that food sovereignty and other initiatives centered in the global South are more attuned to the importance of dealing with inequality (Ibid). In contrast, Holt-Gimenez and Shattuck (2011: 115, 131-132) characterize the food justice movements as more concerned with marginalized people and their access to food and question the notion that they are predominantly made up of elites. They portray the food sovereignty movement as more concerned with structural transformation and redistribution of productive resources, often with a class lens though this is not always clear. In many ways, food sovereignty is more narrowly focused on the outcomes for producers than consumers, although the framework actively promotes the right to food (connected to its de-commodification) and advocates space for marginalized communities to reclaim their own food systems.

Rural and urban – Bernstein (2010: 122-123) asks perhaps the most critical question of food sovereignty and local food systems related to shrinking the distance between rural and urban: “[H]ow plausible are the claims of agrarian ‘counter-movements’ and their champions that a return to ‘low-input’ small-scale family farming [...] can feed a world population so many times larger, and so much more urban, than the time when ‘peasants’ were the principal producers of the world’s food?” Food sovereignty proponents argue that these types of agricultural systems still produce the majority of the world’s food (LVC 2010; ETC 2009), yet the question of how to feed growing urban populations remains valid, whether or not this claim is accurate. According to the United Nations, the majority of the world’s population now lives in urban areas (although, as mentioned in Chapter 2, the definition of urban is not universal) and the number is expected to climb 2.6 billion people by 2050, which represents the entire increase in world population until then plus the migration of 0.3 billion rural inhabitants to urban areas (DESA 2012: 1). In this context the question of how local food systems will feed cities becomes especially relevant.

Food sovereignty advocates that agroecological peasant production is more productive and more capable of adapting to and mitigating climate change (LVC 2009), as is shown by Rosset et al. (2011) in their Cuban case study of the “Campesino-a-Campesino” movement, and therefore food systems built around food sovereignty are more capable of dealing with both hunger and urbanization than the industrial model. Nevertheless, the question of feeding large urban centers has not been dealt with in a systemic way. The case of Cuba illustrates that scaling-up the farmer-to-farmer agroecology methodology still poses significant challenges, particularly in the face of structural barriers (Ibid: 185). Diamantino Nhampossa admits that it would not be possible for small-scale agroecological peasant production to feed Mozambique’s cities immediately, but he is cautiously optimistic about doing so in the future (D. Nhampossa interview, 26 October 2012). Rosset and Manson both pointed to the importance of urban agriculture in answering this question as well, a facet of local food systems that has been largely unexplored by the food sovereignty movement but is recently gaining attention. For example, the September 2012 edition of the Nyeleni Newsletter states that food sovereignty has an urban dimension and lists urban and peri-urban agriculture as a food sovereignty strategy (Nyeleni Newsletter 2012).

Agriculture and nature – “The farm is a big project because you’re domesticating an area so you’re making everything dependent on you. In that way you’re part of it all too. [...] Part of a system. We’re not another species looking down on the environment or from behind a window. We’re part of the food chain. Being good to the environment [...] doesn’t mean just leaving it alone. It means being thoughtful about your interaction with it,” stated Moore (H. Moore interview, 6 September 2012), taking a position that reinforces the dialectical relations between society and nature. Scott (1998: 264) writes, “Cultivation is simplification”, even at its most basic. The food sovereignty model based on agroecological production methods has a different relationship to nature through promoting agroecology, biodiversity and seed-saving, low emission agriculture and shortened supply chains than its industrial counterpart, although Scott’s point is accurate.

While local food systems based in food sovereignty are not the only local food efforts that take ecological questions into consideration, food sovereignty poses a major shift in nature-society relations and a step toward mitigating the metabolic rift. McMichael (2008: 505) maintains that food sovereignty challenges the ecological and social impacts of the industrial model and “engages modern science and technology” in new ways. Schneider and McMichael (2010: 477) argue that metabolic rift theorizing often excludes taking into account the knowledges of local places and agricultural methods that were and are lost as the rift widens. Altieri and Nicholls (2008: 476) offer a number of examples of contemporary agroecology using ancient techniques in Latin America such as the raised beds in shallow waterways – *chinampas* – typical of Aztec agriculture pre-conquest that increase productivity while integrating more easily into the existing local ecosystems. Agroecological methods are intrinsically localized to each specific region and natural environment and they seek to bridge the metabolic rift understood as a break

with ecosystems and as a rift with the reproduction of knowledges. LVC's most active, grounded local food system work is through agroecology trainings like the one recently held in Thailand (LVC 2012).

5.3 What happened and what's next

The definition of local is intimately connected to specific geographies and definitions of place and therefore is particular to each region rather than universal in nature. The idea of place has been blurred and concealed by the globalization project and attendant attempts at universalizing development as industrial, capitalist development; however, the importance of place is reemerging as part of a conversation around how to address the inequality, poverty and hunger around the world. Although local food initiatives in the framework of food sovereignty do not fully address the distances in the global industrial food system, food sovereignty has major implications for understanding the processes of change linked with competing narratives of development. It represents a paradigm shift in rural development thinking and, through the TAMs that advocate for it, has claimed a space on the international stage and become part of the conversation to restructure the food system.

This paper has offered a macro level analysis of how and to what extent local food systems based in food sovereignty counter the distances created and perpetuated in the industrial food system through processes of capital accumulation. Chapter 1 outlined the context, important definitions and problematized the depth and breadth of local food systems' capacity to challenge the dominant global food system. It also presented the scope, organization and arguments of the paper. The analytical approach, three specific theoretical tools and the research methodology were outlined in Chapter 2. In Chapter 3, six forms of distance, categorized as geographical (production/consumption; distant markets; peasant dispossession) and sectoral (producer/consumer; rural/urban; agriculture/nature), were examined in relation to food regimes, aspects of uneven geographical development and the metabolic rift. Chapter 4 began with an analysis of the context in which food sovereignty was formed and is propagated, via TAMs. It also differentiated local food practices by scale, character and method and attempted to position different local food systems along a spectrum between food sovereignty and capitalist agriculture. Finally, Chapter 5 presented the main contentions and insights of the paper and considered food sovereignty against each form of distance.

This research represents a first attempt at dissecting the role of local food systems within food sovereignty and analyzing how far they go in challenging the current model of industrial agriculture. Much of the local food system research encountered through this process was focused on the global North and in particular, North America. More attention to local food systems in the global South, in the form of both specific case studies as well as larger system analyses would be useful. Examining other dimensions of distance, the role of the state and other institutions as well as work that considers these questions

more explicitly within current development discourses are all avenues of future research.

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Appendix 1 – Key Informant List

Key Informant	Location	Organization & Role	Description	Interview Date
Amos Wiltshire	Dominica	DNFTO – Coordinator WINFA – Board member LVC – member	Farmer Farm leader	3 November 2012
Nelson Mudzingwa	Masvingo Province, Zimbabwe	ZIMSOFF – member; agroecology extension worker	Farmer Farm organization staff	25 October 2012
Elizabeth Mpofo	Masvingo Province, Zimbabwe	ESAFF – Vice-Chairperson ZIMSOFF – National Chairperson LVC – ICC member	Farmer Farm leader	16 October 2012
Hilary Moore	Lanark, Ontario, Canada	NFU – IPC representative; Local President EFAO – member	Farmer	6 September 2012
Andrea Ferrante	Viterbo, Lazio, Italy	AIAB – Chair of Federal Council LVC – member IFOAM – member	Farmer Farm leader	2 September 2012
Wendy Manson	Outlook, Saskatchewan, Canada	NFU – former National Board member West Central Road & Rail LVC – member	Farmer Facilitator	2 September 2012
Nettie Wiebe	Laura, Saskatchewan, Canada	NFU – former President LVC – ICC alternate; former North American Coordinator	Farmer Farm leader Professor	1 September 2012
Carlos Marentes	El Paso, Texas, United States (US-Mexico border)	Sin Fronteras Organizing Project – Founder & Director LVC - member	Farmworker organizer Farm leader	3 September 2012
Diamantino Nhampossa	Mozambique	Swedish Cooperative Center - staff UNAC – former Coordinator LVC – Technical support	Former farm organization staff	26 October 2012
Annette Desmarais	Regina, SK, Canada	NFU – IPC advisor LVC – Former technical support staff	Professor	9 September 2012
Peter Rosset	San Cristobal de las Casas, Chiapas, Mexico	LVC – Technical support staff CECCAM - Researcher	Farm organization staff Researcher	3 September 2012

Appendix 2 – Informed Consent Form

Informed Consent Form

I'm Martha Robbins and I am a student in Agriculture and Rural Development at the International Institute of Social Studies (ISS) in The Hague. Thank you for agreeing to participate in my research. I really appreciate the time and experience you are sharing with me. This form outlines the purpose of the research, the overall process, and the parameters of your participation.

Purpose

The research examines how the food sovereignty framework, and particularly the element of building and supporting local food systems, counters various forms of distance inherent in the global industrial food system. I am thinking about distance in two main ways. The first is geographical distance, which refers to the distance between production and consumption, between producers and global markets, between dispossessed peasants and their land. The second is sectoral distance, or the distance created between producers and consumers and between urban and rural sectors. I want to see if local food systems address these various forms of distance in the current global food system. Does food system localization (within a food sovereignty framework) present an alternative to the existing global food system or are local food systems only a niche within a dominant industrial food system?

The research paper is in partial fulfillment of a Masters degree in International Development from the ISS.

Process

Your participation in this research will involve an interview via Skype for approximately one hour. This interview will be recorded for later analysis so that I can accurately capture your contributions in your own words. I will keep the recording.

The draft research paper will be presented to professors and students at the ISS in a student seminar. My supervisor and reader will read the final paper. The final paper will also be in the public domain through the ISS website.

You are agreeing:

- To an interview of approximately one hour (preferably via Skype)
- That the interview will be recorded

- That direct quotes from the interview may appear in my research paper
- That your full name and details provided by you in the interview may be cited in the paper, unless you request otherwise
- That you will communicate with me about anything in the interview you feel uncomfortable with and would like to have omitted from the analysis as soon as possible after the interview
- That the interview material will be used for the purposes of this research and may also be used in future academic writing and presentations

You understand that:

- Your participation in this research is voluntary.
- If there are questions that you don't want to answer, you don't have to answer them.
- An electronic copy of the transcript or the final research paper will be made available to you on request.
- You are free to contact me anytime with questions or concerns about the nature of the research or my research methods. (Email: martha-janerobbins@gmail.com; Phone: 31-62-550-7836)

By signing this consent form I certify that I agree to the terms of this agreement.

(Printed name)

(Signature)

(Date)