Alternative Food Networks with Chinese Characteristics

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Authors Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

Scholars studying Alternative Food Networks (AFNs) have struggled with the question of whether these initiatives are a type of entertainment for a few middle class consumers, or the part of a political struggle to configure new food system relations. My response is that in China, AFNs are both. This research provides an empirically grounded theoretical analysis of AFNs, or assemblages of Community Supported Agriculture (CSA) farms, buying clubs and ecological farmers' markets, forming in China's industrialized regions. AFNs in the global north have emerged in liberal capitalist democracies with industrialized food systems characterized by private land ownership, declining small farm sectors, consolidated farm to retail chains, predominance of supermarket retail, standards and laws to safeguard food safety and an active civil society sector. The Chinese context sits in contrast with its unique version of 'capitalism with social characteristics', a commons approach to land ownership, predominance of smallholder agriculture and traditional marketing chains, a commitment to domestic food security, nascent food safety legislation and a civil society with limited autonomy from an authoritarian state that keeps shifting the terrain of what is permitted. In this landscape, new food procurement relations that I consider AFNs, have emerged in response to the loss of the peasantry and its traditions, environmental crises perpetuated by productivist agriculture policies, and a persistent 'food safety crisis'. These nascent food networks manifest contradictory characteristics. I argue that instead of fitting into the 'either or' categories of conventional and alternative food systems, China's AFNs need be seen as hybrid systems. This research explores 19 AFN cases (CSA farms, farmers' markets and buying clubs) using interviews, site visits, surveys and blog monitoring. It explores these networks using four 'lenses'. First, I examine the capitalist and other-than-capitalist relations in these AFN using a post-capitalist diverse economies framework. I reveal diverse economic relations in China's AFNs where capitalist and non-capitalist relations co-exist and where the persistence of the peasantry, de-peasantization and re-peasantization processes all occur simultaneously. Second, I examine the ecological relations in these networks. I argue that in the context of productivism associated with strong domestic food security policies, these AFNs demonstrate a mixture of traditional and modern production methods. Further, reacting to a widespread distrust of stateled organic and ecological agriculture institutions, producers and consumers in these networks

are forging bottom-up alternatives and constructing their own meaning of ecological and organic through reflexive civic process. Third, I look at the interpersonal relations in these networks and the degree to which they are relations characterized by trust and reconnections between producers and consumers. I examine how re-building trust in the context of China's 'food safety crisis' proves difficult in these AFNs. Using care ethics theory, I reveal how these AFNs can be seen as 'windows' through which people can glimpse different kinds of reconnections and care ethics, that for many result in hybrid producer-consumer identities that complicate market based notions of people who buy and people who supply food. Finally, I look at the political relations in these networks and consider they degree to which they can be understood as transformative. I argue that these AFNs are beginning to create a space 'beyond the market' to fill a civil society void and influence broader food system issues and policies. In the context of the pervasive uncertainty of an authoritarian state, China's AFNs are developing a repertoire of subtle and often covert 'everyday resistance' strategies to challenge hegemony. Beyond being 'simply' sites of material transactions, these AFNs can be seen as 'portals' through which people can connect to trans-global food justice movements that have no official presence in China. Individualist responses of consumption and collective responses of citizens are being transgressed and we can understand AFNs as hybrids of market based initiatives and civil society movements.

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I also want to thank my advisory committee members for coaching and encouraging me and helping me think progressively more deeply about alternative food in China. With your guidance I have tried to push the boundaries of human geography research on alternative food systems by exploring these networks, literally, from the global level to the soil.

Importantly, this research would not have been possible without the CSA operators, farmers' market coordinators, buying club volunteers and others, who generously spent time with me and shared their experiences openly. I understand my future to be caught up with yours, although exactly how eludes me at this point. I know we will meet again, even if only through electronic networks.

Lastly I need to mention my mother, 'Kitty', whose advice, "nothing is impossible' echoed in my head so many times over the past three years. It is because of her encouragement that I even considered the possibility that I could be the first woman in my extended family to attend university - let alone complete a doctoral degree.

When I was about 4 years old, I was digging a large hole in a freshly tilled field on our farm, when my brother came upon me and asked what I was doing. Influenced no doubt by the images on our new television, I confidently proclaimed that I was digging to China. When he asked why on earth I wanted to go there? I explained that the world's best farmers lived there, and they had amazing rice fields on hillsides with ducks walking in them. They plowed their fields with oxen and sat for lunch to eat dumplings under peach trees in blossom, before fishing for supper in a sparkling brook. They walk together singing songs on the way home from the fields, and they wear the best hats.

Well, I got the hats right.

Dedication

To the farmers of forty centuries and the new peasants wearing their hats

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1.0 Contradictions and Paradoxes

Our leader brilliantly displayed his sagely prowess. In place of oppression, he ruled with gentleness and millions of people gave him their hearts.... And then heaven sent no disaster. The spirits of the hills and rivers were tranquil and the birds and beasts, the fishes and tortoises, all enjoyed their lives according to their nature. However, the descendants of these kings did not follow their example, and great heaven sent down disaster When the hungry go without food, the people become unruly. 25 Mencius, Book I, Part II, ch. 4, verse 6.

People cannot earn a living farming anymore in China. There is no honour in growing food. CSA operator

In China today we have enough food to eat, but what we have is not safe to eat.

People are worried about feeding it to their children. It is a new kind of famine.

Buying club volunteer

The first quote above is an excerpt from the "Mandate of Heaven", an ancient story from the Zhou dynasty (11th century BC), later elaborated by Mencius (4th century BC) and taught to every Chinese child since pre-Confucian times. It is a story about what we in the global north might call food security, or perhaps even food justice, and the moral authority of leadership. As the story goes, a leader's mandate to rule is given by Heaven, versus a bloodline or by the voice of the people. The source of legitimacy to rule is vague (Heaven), but the story is clear about how to maintain the legitimacy of leadership. To maintain the "mandate of Heaven" the ruler needs to ensure the harvest is secure and the peasantry is satisfied. According to the story, food insecurity is a cause for rebellion. Linking governance with people's right to subsistence and food security has remained the basis of Chinese political philosophy for over 2000 years.

Consider that, during my lifetime, China has almost miraculously transitioned from experiencing the world's worst famines to becoming the world's largest food economy

(Morton, 2012) and, as the story goes, the rulers have maintained their mandate of Heaven. But now the situation is evolving and many suggest that China is at a crossroads. As detailed in this thesis, a food safety crisis has gripped the country for two decades now and the state (despite threat of the death penalty for violations) has been unable to address the people's concerns. There is a growing inequality between rural and urban people and millions of rural peasants have abandoned all hope of earning livelihoods on the land guaranteed to them and are turning to driving taxi cabs in the city or working in factories. This has left old people and children to farm in the countryside on land which is both ecologically fragile after several decades of being pumped up by synthetic fertilizers and pesticides, and politically vulnerable under a state hungry for land to fuel its economic growth and meet its food security goals. The social and ecological costs associated with China's transition 'miracle' are turning out to be extensive.

The subsequent quotes, from a CSA operator and a buying club volunteer interviewed for this research, illustrate the frustrations with a state that seems to be neglecting its responsibility to subsistence ethics in the social contract described by the mandate of Heaven story. While the meaning of subsistence may have changed to include food quality in addition to sufficiency, the symbolism of the mandate of Heaven story remains present in examples of urban and rural resistance in present day China (Perry, 2008). Indeed, breaches in the 'social contract' suggested by the story underpin the emergence of new and diverse forms of food procurement relations that I call alternative food networks¹ (AFNs) which are rapidly expanding in China's peri-urban landscape.

On the surface, this seems like a narrative we know very well. Throughout the global north², AFNs have evolved in response to an agro-industrial system that disconnects people from food and food producers, resulting in lost traditions, threats to small-scaled producers,

¹ There is some variety in the nomenclature used to describe such initiatives. I am using the term 'alternative food networks' as equivalent to various terms used in the scholarship including: 'alternative agro-food networks' and 'alternative food systems'.

² There is no simple way to 'categorize' China and its relation to other parts of the world. I use the terms 'global north' and 'global south' to refer to countries grouped together based on socio-economic and political characteristics, not as a geographic divide. In this dissertation, global north includes: The US, Canada, Europe and Australasia while global south refers to Africa, Latin America and Asia, including China. I recognize this to be somewhat arbitrary. Depending on the 'development' indicators used, China could also be considered part of the global north. Since I use these terms to describe groups of countries rather than specific geographic locations, I capitalize neither word.

environmental degradation and consumer anxieties about food quality and safety. These alternative networks are assemblages of diverse initiatives that include community supported agriculture (CSAs), farmers' markets and buying clubs. The unifying characteristic of these components is a focus on more direct connection between producers and consumers and a centering of ecological forms of production. However, little examination of the concepts and contexts underpinning these 'alternatives' has occurred outside of the global north.

AFNs in the global north have emerged in liberal capitalist democracies with industrialized food systems characterized by private land ownership, a declining small farm sector, consolidated farm to retail chains, predominance of supermarket retail, standards and laws ostensibly to safeguard food safety, and an extensive civil society sector organizing and advocating for changes in various ways. The Chinese context sits in contrast with its unique version of 'capitalism with social characteristics', a commons approach to land ownership, predominance of smallholder agriculture and traditional marketing chains based on wholesale and wet markets, a focus on agricultural productivity to support an obsession with food security and increasing meat consumption, nascent food safety legislation, and a civil society with limited autonomy from an authoritarian state that keeps shifting the terrain of what is permitted. I suggest that much could be gained from research that explores the emergence of AFNs in this contradictory and shifting landscape. This research asks, how can we explain the recent development of alternative food networks in this remarkably different context, and how does this exploration help move forward theorizing on alternative food relations as a global phenomenon?

Scholars studying AFNs have struggled with the question of whether these initiatives are a type of utopian entertainment for a few middle class consumers or the beginning of a political struggle that configures new food system relations (Goodman & DuPuis, 2002). My response is that in China, they are both. There are complex motivations behind China's AFNs. Responding to the loss of the peasantry and its traditions, environmental crises perpetuated by productivist agriculture policies and a persistent 'food safety crisis', AFNs in China manifest hybrid and sometimes contradictory relations. These findings help us move beyond the binary thinking that can assume 'alternative' food networks are posed in opposition to mainstream

systems. I argue that China's AFNs do not clearly 'fit' into 'either or' categories of capitalist/non-capitalist, modern/traditional, producer/consumer or global/local. Rather, China's AFNs need be seen as hybrid systems with a 'yes and also', or perhaps given the research setting, a 'yin and yang' nature.

In developing the argument, I begin in Chapter 2 by introducing the concept of AFNs and outlining my research approach and methods. Framed within a post-structural, political economy approach, I provide an empirically grounded theoretical analysis of CSA farms, buying clubs and ecological farmers' markets that comprise the emerging AFNs in China's industrialized regions. Using mixed methods (interviews, site visits, surveys and blog monitoring) I draw on four different theoretical 'lenses' (diverse economies, functional integrity, ethics of care and everyday resistance) through which I examine the economic, ecological, interpersonal and political dimensions of these AFNs. Throughout this analysis, I explore how China's shifting economic, environmental, cultural and political context influences and shapes the hybrid forms these AFNs take.

Chapter 3 overviews China's mainstream food system as the backdrop to the emergence of AFNs. I paint a picture of a hybrid system, or what some refer to as a 'transitional' system (McCullough, Pingali & Stamoulis, 2008), that combines elements of both traditional and modern food chains, and is changing very fast. I then describe how CSA farms, a new type of farmers' market, and buying clubs have spontaneously emerged and become entangled in networked relations that I call AFNs. Here I introduce a typology that illustrates the diverse motivations of producers and consumers joining these networks.

Following these introductory chapters, my analysis and argument fall into four parts organized into Chapters 4 – 7. Each of these chapters draws on a different theoretical perspective as a lens through which the economic, ecological, interpersonal, and political dimensions of these nascent AFNs are examined. While interrelated, each of these chapters also stands as an independent narrative that weaves together relevant aspects of the Chinese context and global north AFN scholarship with my analysis of the data. Figure 1 offers a conceptualization of the document's structure.

1.1 Economic Hybrids of Capitalist and Non-Capitalist Forms

Chapter 4 examines the economic relations in these networks and how they are shaped by the commons approach to land and the dual urban-rural citizenship (hukou) of China's agrarian reform process. AFNs are emerging in a context where processes of 'depeasantization' and agrarian capitalism are beginning and global north scholars have argued that market based alternatives like AFNs are inevitably co-opted or mainstreamed by these processes. However, following emerging thinking on post-capitalist diverse economies (Gibson-Graham, 2008), I recognize the diversity of economic life and argue that these emerging AFNs demonstrate hybrid relations, where capitalist and other-than-capitalist forms are entangled, and which present opportunities to reproduce the peasantry rather than eliminate it. In this Chapter, I detail the ways in which labour relations, market transactions, surplus and financing are mobilized in these networks of economic diversity. On one hand, many of the CSA farms that comprise China's AFNs have been established by young urban 'entrepreneurs' who recognize the opportunities in an emerging market economy and can be characterized as pragmatic and instrumental with limited risk sharing with consumers and extensive use of waged labour. On the other hand, relations in these networks are complicated by a commons approach to rural land that gives control to marginalized villagers and peasants, while 'privileged' urban entrepreneurs seeking to respond to market opportunities need to negotiate for it. At the same time, motivated to reduce urban-rural inequities, protagonists in these networks are supporting and re-building peasant forms of agriculture which focus on livelihoods and re-investment of surpluses into the farm's ecology. The result is an entanglement of capitalist and other-than-capitalist relations in which we see the persistence of the peasantry, de-peasantization and re-peasantization processes occurring simultaneously. While in many ways the state privileges commercial and entrepreneurial business forms, these profit-seeking agricultural firms do not preclude or eclipse other economic forms in China's AFNs. Further, China's AFNs do not risk being 'conventionalized' (Buck, Getz & Guthman, 1997) because they exist in a landscape where, as a result of land allocation policies, most of the farms are small, and petty-traders abound.

1.2 Ecological Hybrids of Traditional and Modern Production

In Chapter 5, I turn to the ecological relations in these networks and the ways in which they define and manifest 'organic' production approaches in the context of a 'top-down' approach to ecological sector governance through standardization. The dream of agricultural modernization in China follows a model of technologically driven, production-focused agriculture driven by an obsession with food security which has forced traditional agriculture to the margins. I argue that in this context, AFNs articulate a mixture of traditional and modern production methods, knit together in a type of ecological hybridity. Drawing on elements of functional integrity, I see the practices in these AFNs to be largely ecological with a focus on biodiversity, closed loop systems and de-emphasis of externally sourced inputs. However, the absence of some essential practices, such as the use of cover crops, suggests that these AFNs are nevertheless influenced by the dominant productivist ideology of the state and associated market pressures. Yet at the same time, the CSA operators in these AFNs are trying to adopt traditional practices that the state version of ecological agriculture has abandoned. While the search to recover lost traditional knowledge is widespread in these networks, it is not essentialized. Instead, there is a blending of traditional and modern that illustrates reflexive and pragmatic rather than ideologically-driven approaches. Further, reacting to a widespread distrust of state-led organic and ecological agriculture institutions, producers and consumers in these networks are forging bottom-up alternatives. Producers work to ensure transparency for consumers through extensive on-line and on-farm information sharing about their farming practices. At the same time consumers in these networks, through buying clubs and farmers' markets, are resisting and reconfiguring state standards by constructing their own meaning of ecological and organic based on a reflexive civic process that is geared toward the development of 'participatory certification'.

1.3 Producer-Consumer Entanglements

Re-connections and trust between consumers and producers are seen as the defining criteria of direct marketing AFNs in the global north. But in the context of China's 'food safety crisis', trusting the person who grows your food proves difficult. In Chapter 6, I move to the level of micro-politics and examine the interpersonal relations in China's AFNs by using ethics

of care theory as an analytic. I argue that, in this context of pervasive uncertainty about food quality, most consumers are drawn into AFNs motivated by distrust of the dominant food system versus a desire to establish trust with food producers. Indeed CSA operators, market managers and buying club organizers alike explain their challenges regarding establishing connections with consumers given their strong suspicions of food relations, making the process of deepening the care and trust relations in these networks difficult. This is not to suggest that people don't care. Rather I argue that people's motivation to care for themselves and their families draws them into an ethics of care for land and food quality versus caring for producers. On almost all of the CSAs I visited, operators set aside a portion of the land, sometimes as much as one third of the farm, on which members can grow their own food. Motivated variously by the desire for quality food, relaxation and/or health, these consumers take on the role of producers and thus we see an entanglement of these identities. I argue the construction of these 'weekend farmers' in these networks complicates the identities of a passive consumer and an autonomous producer in the marketplace. These producer-consumer hybrids are further evidenced by consumers who enter these networks with the same distrust as others, but like what they experience. Over time, they deepen their care relations, cultivate informal guanxi networks, and take on active roles in food provisioning, thus further destabilizing the producer-consumer binary. In conclusion, I argue that in this context of pervasive distrust in food and food governance, AFNs become 'windows' through which people can glimpse different kinds of re-connections and care ethics, that for many result in an entanglement of producer-consumer identities and a nascent civil society organizing around food.

1.4 Hybrids of Market and Nascent Civil Society

The final 'lens' in my analysis explores the ways in which China's AFNs move beyond market relations and work toward transformative change. It would be simplistic to suggest that these nascent networks have challenged profound social injustices in their brief history. To the contrary, I argue there is a deeply held historical distrust of peasants in these networks, aggravated by a cultural discourse about quality and social class (*suzhi*), that works against re-connecting with people who grow food. These AFNs, like their sisters in the global north, can be blind to privilege, and their charitable acts, though well intentioned, do little to

challenge structural conditions that perpetuate peasant marginalization in China. Yet, by using reflexive and inclusive processes, these AFNs are working to create a space 'beyond the market' to fill a civil society void and find opportunities to have influence on broader food system issues and policies. These networks are challenging hegemony every day – but not overtly. I reveal how, in the pervasive uncertainty of the authoritarian state, China's AFNs are developing a repertoire of subtle and often covert 'everyday resistance' strategies. Techniques such as bloggers employing sarcasm in their use of state rhetoric and slogans, buying clubs avoiding business registration, farmers' markets evading bureaucratic requirements, peasants pilfering food they believe is rightfully theirs, are all examples of everyday resistance, directed at the state, in a context where the boundaries between what is permitted and risky are constantly shifting. In addition, I suggest that there are also more open forms of dissent circulating in these networks. In particular I argue that on-line communications, particularly through the new micro-blog platform called 'Weibo' is becoming a central tool of resistance for these nascent food citizens. Further, I observe the ways in which these networks are actively building linkages and developing heterogeneous alliances. Sheltered by the safety of personal connections versus formal organizational linkages, which the state could find confrontational, China's AFNs are drawing support at diverse scales and have established networks both within and outside China. AFNs have developed entangled relations with the indigenous New Rural Reconstruction movement and this has opened the door for them to extend relations with trans -global food justice movements that otherwise have no official presence in China. In this way, whereas the previous chapter suggests AFNs can be seen as a window to entangling producer-consumer relations, here I argue this window turns into a portal through which people can move beyond these networks and join global spaces of emancipation. In these ways, individualist responses of consumption and collective responses of citizens are being transgressed, and we can understand AFNs not simply as market based networks of food provision, but rather as the formation of nascent civil society movements.

In summary, these four chapters develop the argument that AFNs in China can be seen as constructing economic hybrids of capitalist and other-than-capitalist forms, ecological hybrids of traditional and modern practices, consumer-producer hybrids and political hybrids of market and civil society relations of resistance. As a first account of AFNs emerging in

China, I favour breadth over depth in my analysis. Nonetheless, these findings offer an opportunity to contribute to theorizing on alternative food networks that resonates beyond its limited global north applications. This 'first look' at these networks sees state and capital dominance matched by possibilities or 'openings' that start to reveal how different production and consumption might be arranged.

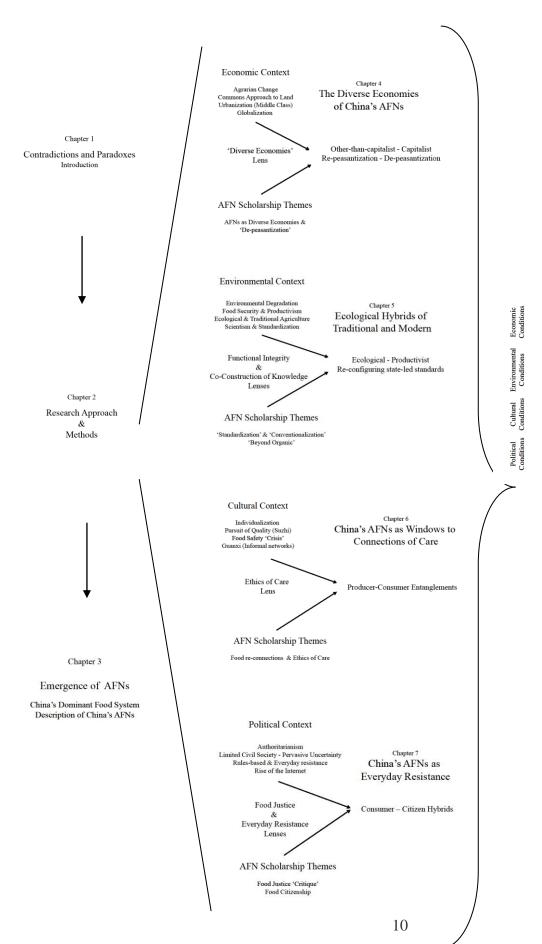


Figure 1: Document Outline



Drivers Restraints Commons Approach to Land Globalization - 'Opening' Urbanization & Middle Class Globalization - 'Opening' Urbanization & Middle Class Food Security & Productivism Environmental Degradation Scientism & Standardization Guanyi Networks Suzhi (Quality) Discourse Traditional Pastoral Individualization & Distrust Food Safety Crisis & Distrust Top-Down Policy Making Limited Civil Society Top-Down Policy Making Limited Civil Society Rise of the Internet Pervasive Uncertainty

Extending AFN Theory

Moving beyond the local trap
Tradition as a transformative force
Troubling 'producer' & 'consumer' identities
Normalizing small scale
Emphasizing informal networks
Expanding repertoires of resistance

2.0 Research Approach and Methods

There is growing consensus that the concept and label 'alternative food networks' (AFNs), while useful in describing a food phenomena that emerged in the 1990s, may not effectively describe the complexities and nuances of diverse food provision and procurement systems that have developed since that time (Holloway et al., 2007; Tregear, 2011). There has been a suggestion that we need to re-invigorate the scholarship and broaden how we label and study them (Maye, 2013). This chapter first lays out a critique of AFNs by problematizing the term 'alternative'. Second, I briefly overview the post-structural political economy approach as an over-arching philosophy that guides my analysis. Nested within this analysis, I describe how a set of pervasive dualisms in AFN scholarship has prompted the consideration of these phenomena as co-constituted along four dimensions - economic, ecological, interpersonal and political. I then introduce four 'lenses' that I use to focus my literature review and analysis along these dimensions. Finally, I describe how I approached fieldwork in China and the networked case study approach and data collection methods I used.

2.1 A Diverse Family of AFNs

AFN has been defined as "a broad embracing term to cover newly emerging networks of producers, consumers and other actors that embody alternatives to the more standardised industrial mode of food supply" (Renting, Marsden & Banks, 2003, p. 395). A considerable scholarship has interrogated their rapid expansion including numerous reviews, from various disciplinary perspectives³. I think of AFNs as a growing 'family' of food system relationships, being explored from a wide variety of disciplinary perspectives and geographical contexts. The ways in which AFNs have been understood (the way the family is defined) varies significantly, making it difficult to know 'whose in and whose out', or if we are even talking about the same phenomena. AFNs have been explored in terms of entrepreneurship (Marsden & Smith, 2005), shortened value chains (Ilbery & Maye, 2005), and their contribution to economic and rural development (Morgan, Marsden & Murdoch, 2006; Renting et al., 2003;

³ See for examples: Goodman, DuPuis & Goodman, 2012 and various themed journal issues including: International Planning Studies 4(3), 1999, Sociologia Ruralis 40 (2&4), 2000, 41(1), 2001, 42(4), 2002; Journal of Rural Studies 19(1), 2003; Environment and Planning A 35(3); British Food Journal 105 (8), 2003; International Journal of Sociology of Food 19(3).

Sonnino & Marsden, 2006). Other scholars in the alternative family see things in more politicised ways and investigate AFNs as movements of resistance in opposition to a dominant regime (Allen, 2008; Bedore, 2010) often focusing on social justice. Other scholars focus on AFNs as responses to negative environmental effects of an industrial food supply and focus on ecological alternativeness and issues of 'quality' food production and sustainable development (Marsden, 2012; Higgins, Dibden & Cocklin, 2008; Seyfang, 2006; Sonnino & Marsden, 2006). Yet another group in this AFN extended family consider themes of scale and look at place-based systems and how these networks are embedded in the local (Brown & Miller, 2008; Chiffoleau, 2009; Feagan, 2007) (Whatmore, Stassart & Renting, 2003), while others describe the ways in which relations are extended to distant others (Jaffee, 2007). The diversity in this AFN family has been describe as a series of "non identical collective nouns" (Whatmore, et al., 2003, p. 389) such as organic networks, fair trade networks, artisanal networks, local or regional networks, urban agricultural networks and so on, that are used variously to describe family members.

The primary challenge with the AFN concept is that it lacks inherent normative content. In other words, 'alternative' is always relative to something else. In both scholarship and practice the term is used to distinguish from 'mainstream' food relations, making it difficult to describe AFNs without using the term 'alternative', and thus offering no real definition at all, and rendering it unhelpful. Since 'alternative' is always relative to a 'mainstream' system, and since that comparator itself keeps changing, what is considered 'alternative' also keeps shifting. As Holloway et al. (2007) describe, "although discourses of 'alternativeness' might be powerful in stimulating challenges to what are felt to be, or experienced as, unjust economic relations, "the 'alternative' itself is a slippery concept, resisting definition and shifting as soon as attempts are made to tie it down" (p. 80).

2.2 Post-structural Political Economy Approach

Many academic approaches and theories shape the study of alternative food systems and networks, making the field epistemologically and methodologically pluralistic. In this section, I describe the evolution of a broad hybrid epistemology in which I situate this research.

2.2.1 Rooted in Agrarian Political Economy

The roots of the agro-food scholarship extend to the 1970s with an understanding of the rural as a space of production being transformed within penetrating capitalism. This perspective stresses the changing structural and power relations in the food sector, the globalisation of food procurement and the unequal relations between capital and labour/workers. Today this approach has evolved to inform work on food regimes (Friedmann & McMichael, 1989), commodity systems analysis (which has been extended to value chain research) (Friedland, 1984), work on the growing concentration of power of the retail sector in the global system (Reardon, Berdeque & Timmer, 2005), and global justice movements (Borras, 2010). Historically, the approach was critiqued for minimizing the impacts of social, spatial and historical contexts and overlooking the role of consumption in agro-food studies (Marsden, 1989). More recently, however, it has broadened to engage with post-structural theorizing that understands food systems as hybrid relations (Campbell, 2009; Friedmann, 2009).

2.2.2 Informed by Post-Structuralism

An epistemological shift that occurred in the social sciences in the 1960s, post-structuralism is a system of thought that acknowledges how multiple meanings are continually being created or constructed and changed, and rejects the idea of a single knowable 'truth'. Whereas the classical political economy view, following Marx, looks to the material aspects of food and understands food as a fetishized commodity whose true value is hidden, the post-structural view, following Durkheim, looks more to the symbolic meaning of food, or food as totems that mirror society (Goodman, DuPuis & Goodman, 2012, p. 34). During the 1980s, as consumer-led food activism grew, AFN scholarship shifted to post-structural approaches in order to better theorize the significance being accorded to consumption and rejected the use of classical agrarian theory that assumed consumers as powerless (Goodman et al., 2012, p. 35). From the 1990s forward, agro-food scholars have used a broad range of post-structural approaches to negotiate the dualisms that pervade alternative food scholarship. These approaches understand that alternative food systems are shaped not only by structural and material factors, but also by cultural discourse and meanings.

2.2.3 A Hybrid Post-structural, Political Economy Approach

Critiques have been levelled at both the political economy and post-structural schools in terms of their application to the study of AFNs. Post-structural research has been criticized for privileging culture and discursive analyses and ignoring structural conditions and power relations manifest within and between networks, as well as between networks and the political-economic context in which they are evolving (Marsden, 1989). Increasingly, agro-food scholars have noted the importance, for example, of considering state policy (Andree, Dibden, Higgins & Cocklin, 2010) and historical agrarian change (Pratt, 2009; Qazi & Selfa, 2005) as a backdrop to alternative food networks. This "ontological rapprochement" (Guthman & DuPuis, 2006, p. 438) which blends these perspectives has helped food system scholars move beyond a conceptual divide between research that has focused on agro-food production from a political economy perspective and that which has focused on consumption using a cultural theory perspective. Such a hybrid approach sees food networks as influenced by an interaction of material and structural conditions (class, production) as well as the socio-cultural factors such as systems of meaning, values and beliefs (Goodman et al., 2012).

A post-structural political economy approach to AFN research embraces diverse theories and analytical tools. In the following section, I describe pervasive dualisms that have been characterised in AFN scholarship and introduce four particular analytics (which I refer to as 'lenses') that I use to capture these hybrid relations in China's emerging AFNs.

2.3 Dualisms and Hybridity in AFN Scholarship

The diversity of AFNs has posed a definitional challenge for research with scholars lamenting the absence of a coherent definition that can envelop and unite the fragmented theoretical and empirical discourse and practices (Tregear, 2011; Whatmore et al., 2003). As a result, scholars have unpacked the various characteristics of AFNs along several dimensions, and in so doing exposed a set of problematic binaries or dualisms that characterise the field. For example, a pervasive producer-consumer dualism underlies much of the AFN discourse and a rift lies between studies that focus on the production side of food systems and those that draw on consumer practices (Goodman & DuPuis, 2002; Lamine, 2005). It is a divide we need to move beyond and scholars conclude that we need to integrate production and consumption

activities, or "how we 'grow food' and how we 'know food'" (Goodman & Dupuis 2002, p. 6). Similarly, AFN scholarship has drawn on a set of over-simplified dualisms such as traditional-modern, biodiversity-monoculture, organic-conventional, local-global and so forth (Blue, 2009; DuPuis & Goodman, 2005; Ilbery & Maye, 2005).

These and other dualisms have prompted some scholars to consider AFNs as hybrids, where we understand 'both and' versus 'either or' categories (Slee & Kirwan, 2007). Thus instead of seeing alternative and mainstream food systems as opposites, this approach sees a set of continua where various dimensions of food systems are co-constituted as hybrid forms. In this approach, scholars look for the interconnectedness and relationships between things that we might initially see as opposites and thus, de-essentialize or de-centre normative concepts. Scholars taking this approach have seen for example, how AFNs construct hybrids as they mix capitalist and other-than-capitalist economic logic (Ballamingie & Walker, 2013; Andree et al., 2010; Cameron & Gordon, 2010), blend traditional, organic and productivist ecological relations (Egelyng, De Abreu, Li & Fonesca, 2013; Guthman, 2000), entangle roles of producer and consumer (Renting, Schermer & Rossi, 2012), simultaneously embrace local and global (Hinrichs, 2003) and/or demonstrate hybrid political forms of market-based individualist and civic collectivist politics (Lamine, Darolt & Brandenburg, 2012). In summary, AFNs defy simple categorization and need to be understood as diverse, hybridized phenomena, along various (economic, ecological, interpersonal and political) dimensions.

This dissertation focuses on this conception of hybridity by looking at the emergence of AFNs in China, a context where the conventional posed in opposition to alternative is not so clearly capitalist or neoliberal, and where different socio-cultural, historical and ecological contexts may shape this emergence differently. Figure 2 summarizes this hybridity, or dimensions of 'alternativeness' drawn from global north AFN scholarship. Often AFN scholarship focuses on just one of these dimensions. However, considering this research is an early study of China's 'alternative' food procurement networks, I favour breadth over depth and consider all four of these dimensions, through a set of lenses outlined below, in order to reveal the complexity and diversity of these emerging AFNs.

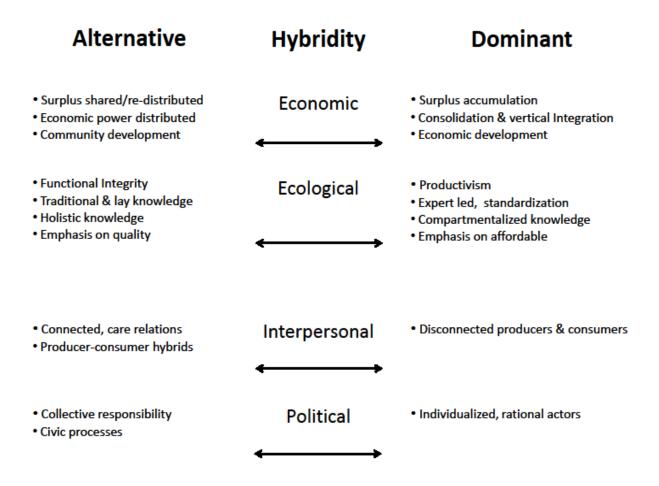


Figure 2: Hybrid Relations of AFNs across Four Dimensions

Source: this author

2.4 Research Framework: Constructing Four 'Lenses'

To guide my analysis, I have selected four 'lenses' or analytics through which the hybrid relations in each of the above four dimensions can be examined. This results in four interrelated studies that comprise Chapters 4, 5, 6 and 7. These dimensions are not as discrete as categories might suggest of course. However, separating them, although somewhat artificial, develops a useful heuristic device for identifying contradictions and paradoxes relative to China's emerging AFNs. These different lenses are developed in greater detail within each of those chapters, but here I provide an initial overview. Each of these lenses is drawn from a

different theoretical perspective and each suggests a set of questions and indicators to guide my reading of the data. These are summarized in Table 1 and described below.

Table 1: Outline of Hybridity Dimensions and 'Lenses'

Hybridity	Analytical Lens	Guiding Questions	Themes & Indicators
Dimension			
Economic Ecological	Diverse Economies Framework (Gibson-Graham, 2006) Functional Integrity (Halberg, 2012; Luttikholt, 2007) Co-construction of Knowledge	To what degree are Chinese AFNs demonstrating diverse and/or hybrid economic logics? To what degree do the production practices in Chinese AFNs reflect a mutual interdependence of human and ecological systems?	Enterprise Types Organization of Labour Land Relations Types of Transactions Financing of Enterprises Landscape, species and genetic diversity Closed Loop Systems Protection of soil structure and biology Protection and conservation of water
	(Goodman & DuPuis, 2002)	How do participants in these networks conceptualize and negotiate the meaning of 'organic'?	
Interpersonal	Ethics of Care (Tronto, 1993)	In what ways are producers and consumers in China's AFNs connecting through ethics of care?	Phases of Care ethics: to care about, to care for, to give care and to receive care
Political	Everyday, resistance (Kerkvliet, 2009; Scott, 1985)	In what ways do China's AFNs respond to and/or challenge dominant relations of power?	Repertoires of resistance (reflexivity, diffused contention, evasion, embedded activism etc.)

Source: this author, drawing on scholarship cited

2.4.1 Economic Lens: Diverse Economies

This lens examines the ways in which AFNs in China are producing diverse economic relations. Following questions being asked by post-capitalist scholars, I ask, to what degree are Chinese AFNs demonstrating diverse and hybrid economic logics? (Gibson-Graham, 2008; McKinnon, 2010; Pretes & Gibson, 2008). To respond, I use the diverse economies framework advanced by Gibson-Graham (2006) which presents a comprehensive

way to understand economic relations across capitalist, alternative capitalist and non-capitalist fields, and is being seen increasingly by global north scholars as useful in the study of AFNs (Ballamingie & Walker, 2013; Cameron & Gordon, 2010; Dixon, 2011; Marsden & Franklin, 2013). The diverse economics framework helps to reveal "economic difference" (Gibson-Graham, 2008, p. 624) by looking at five dimensions of economic diversity: transactions (market, non-market, alternative market), labour (waged, alternatively compensated, unpaid), enterprise type (how surplus is expropriated and/or re-distributed), land relations (private, commons) and how enterprises are financed. The framework is drawn from Gibson-Graham's post-structural critique that de-essentializes 'capitalism' to see it not as all-encompassing, but rather as something that has an "outside" or other-than-capitalist relations (Gibson-Graham, 2006, p. 20). By unpacking the economic relations in this detail, the diverse economies framework helps to dissolve the meta-narrative of 'capitalism' that can mask heterogeneous economic relations. In this way, it rejects the tendency to evaluate food systems as either alternative or mainstream, and instead reveals nuance and diversity.

2.4.2 Ecological lenses: Functional Integrity and Ways of Knowing Food

Observing that social sciences based AFN research has all too often simplified or left ecological relations uninterrogated, scholars are pressing the need to bring ecology and nature more fully into the interrogation of alternative systems (Jones et al., 2010; Mariola, 2008). AFN scholarship espouses the values of organic and ecological production (DuPuis & Gillon, 2009; Jarosz, 2008; Marsden, 2012) but details of the farming practices that characterize these approaches are seldom elaborated. This vagueness reflects the observation that around the world there exists both a formalized ecological sector where practices are defined and codified and a more informal sector that lacks consistent definition (Parrot, Olsen & Hogh-Jensen, 2006). This research embraces a broad view of organic to include production systems where there is no formal certification, but that brings with it the problem of definition.

Considering compliance with the Chinese organic standard as a definition of 'organic' is problematic. While the Chinese organic standards (described more fully in Chapter 5) are clearly codified with a tangible set of 'rules' that could be assessed, smaller scale producers (such as those interviewed in this research) often don't pursue certification because

of cost, or because it is not seen as necessary for direct marketing. Further, social science scholars understand that definitions of 'organic' or 'ecological' are not 'out there' to be discovered. Rather these are relational concepts whose meanings need to be negotiated. To embrace this complexity, I use two different negotiated meanings of organic to examine China's AFNs. First, drawing on a meaning constructed by 'experts', I use indicators of functional integrity (Halberg, 2012; Luttikholt, 2007) and ask, to what degree do the production practices in Chinese AFNs reflect a mutual interdependence of human and ecological systems? Second, I complement this 'objective' assessment of farming practices by considering the ways in which producers and consumers in these networks are co-constructing knowledge and practice standards and deciding what is organic or ecological in these networks for themselves, and how this lay definition arises vis-a-vis the state-led construction of an organic standard.

2.4.3 Interpersonal Lens: Ethics of Care

Scholarship that interrogates ideas and practices of untying (disconnecting) and retying (re-connecting) to food is only just beginning in China (Klein, 2013; Kleinman et al., 2011). In contrast, in the global north these concepts have been foundational to AFN scholarship for over two decades. The tangible and intangible qualities of connections between and among producers, consumers and food production, through local, direct exchange (as in for example CSAs, buying clubs, farm shops, farmers' markets) have been extensively explored and contested (Chiffoleau, 2009; Cox et al., 2008; Feagan & Morris, 2009; Feagan & Henderson, 2009; Hendrickson & Heffernan, 2002; Hinrichs, 2000; Kneafsey et al., 2008). This scholarship has typically drawn on the concept of re-embedding economic and social relations (Granovetter, 1985; Polanyi, 1944). Multiple perspectives and interpretations have been elaborated (Feagan & Morris, 2009; Hendrickson & Heffernan, 2002; Kirwan, 2006) but it seems there is little consensus emerging down this path and scholars are revisiting the utility of this "almost magical" (Hinrichs, 2000, p. 297) concept of embeddedness in food systems research. In the absence of a widely agreed upon theory for investigating the interpersonal dimension of AFNs, I join an emerging scholarship (Cox, 2010; Kneafsey et al., 2008) that is exploring the application of Tronto's (1993) theory of care ethics to AFNs. Similar to the concept of embeddedness, ethics of care theory understands that economic relations are

enmeshed in relations with human and non-human others and focus on a sense of responsibility for others. Thus, care ethics challenge ideas of individualism and of a society organized around efficiency and competition (Lawson, 2007). However, care ethics are not simply thoughts or propositions. Rather care ethics are understood as a set of practices (Lawson, 2007; Tronto, 2006). In my analysis, I look at the interpersonal relations and practices in China's AFNs using Tronto's four phases of care: to care about, to care for, to give care and to receive care.

2.4.4 Political Lens: Everyday Resistance

So what if these networks are based on strong ecological practices and interpersonal relations that is 'care-ful' and fair? In what ways are AFNs moving beyond instrumental market relations to bring about larger scale structural changes? This idea of moving beyond the market is reflecting a current line of theorizing in AFN scholarship that sees these networks as complex entanglements of market and non-market relations. Scholars have evoked the idea of 'food citizenship' (Welsh & MacRae, 1998) to describe how producers and consumers in AFNs move beyond buying and selling food, toward shaping state and/or global policies that impact the broader food system. This framing in the global north is based in a long history and culture of a civil society distinct from the state and the market. The situation in China is remarkably different in that there is no historic separation between the individual and the state, and the degree to which a new independent civil society is emerging is contested. To examine this question of transformative change in China, I widen the definition of what we have typically thought of as 'resistance' in the global north and draw on theories of everyday resistance (Kerkvliet, 2009; Scott, 1985). These "everyday politics" understand people to be "embracing, complying with, adjusting and contesting norms and rules regarding authority over, production of, or allocation of resources and doing so in quiet, mundane, and subtle expressions and acts that are rarely organized or direct" (Kerkvliet, 2009, p. 232). Indeed, it is a form of resistance typically seen in the context of the pervasive uncertainty of an authoritarian state. I use this theory of everyday resistance to reveal the repertoires of resistance being practiced by China's AFNs.

I use this set of four analytics or 'lenses' to look across different dimensions of hybridity, in order to understand the economic, ecological, interpersonal and political aspects

of China's emerging AFNs. I try to balance critique and optimism in my investigation. The next section details my research methods.

2.5 Research Methods

Much of the global north AFN scholarship is based on single case study research, and increasingly scholars have argued the need for research to move beyond considering discrete initiatives, toward considering initiatives in networked relations (Chiffoleau, 2009; Lamine et al., 2012). This research uses an inter-related multiple case study design that considers a cluster of individual initiatives or cases that are assembled into a network or system. My interest is in understanding how these initiatives perform when brought together into networked relations, versus considering them as discrete case studies. Thus, the network becomes the primary unit of analysis. The approach enables empirical examination in real-life context and has the advantage of illustrating a variegated food landscape versus one particular initiative. This broader view is considered especially useful in situations like this one, where little previous research has occurred (Yin, 2009). On the other hand, disadvantages of the approach relate to the unwieldy amount of data, especially if qualitative methods are among those used.

2.5.1 Types of AFNs Examined

My focus is on AFNs that address and contest organic and ecological food with a short distance between where food is grown and where it is procured. These 'short chain' initiatives are seen to possess various dimensions of 'alternativeness', such as redistributing value to small scaled producers and building re-connections between producers and consumers (Whatmore et al., 2003). I identified networks in China that are comprised of the three types of initiatives most frequently identified as 'alternative' in global north scholarship:

• Community Supported Agriculture (CSAs) is a frequently studied producer-consumer venture type in alternative food system scholarship (Cox et al., 2008; DeLind, 2003; Feagan & Henderson, 2009; Galt, 2013). CSAs focus on building a community of consumers (members) around a farm. Members make a payment to the farmer in advance of the growing season in exchange for a share of whatever the farm produces, thereby sharing production risk with the farmer and eliminating costs of packaging, marketing, and retail.

- Farmers' markets, where consumers buy goods directly from producers, are often considered as examples of AFNs in global north scholarship and interrogated as such (Brown & Miller, 2008; Feagan & Morris, 2009; Kirwan, 2006; Smithers, Lamarche & Joseph, 2008).
- Buying clubs are groups of consumers who join together to create their own approach to food provisioning where they can source food of their choosing and reject what is presented to them by the industrialized food system (Little et al., 2010). Unlike on-line or supermarket food procurement that is focused on consumer demand for convenience within a for-profit ethic, buying clubs are typically organized by volunteers, who procure food from deliberately selected farmers who meet production standards that the consumers have developed. The procured food is then divided into individual orders for pick up or delivery.

2.5.2 Data Collection and Analysis

My research is situated within a larger, SSHRC-funded initiative. Dr. Steffanie Scott and a team of doctoral students (Aijuan Chen, Zhenzhong Si and I) at the University of Waterloo's Department of Geography and Environmental Management. Collectively we have conducted over 120 interviews over 15 months of fieldwork from 2011 to 2013. This fieldwork spanned 13 provinces and municipalities including Beijing, Liaoning, Shandong, Henan, Anhui, Jiangsu, Shanghai, Zhejiang, Sichuan, Chongqing, Guangxi, Fujian and Hainan. Interviewees were key stakeholders in China's ecological agriculture sector. Their backgrounds ranged from employees and owners of organic and green farms, representatives of organic certification bodies, government agencies, consumer associations, NGOs, academics and community organizers. This dissertation draws on data that I collected first-hand, with support of a translator, as well as data that other team members collected and transcribed for collective use. I made two trips to China, in April 2012 and November 2012, each for two weeks, and used four different methods to collect data: semi-structured interviews, site visits, a written survey (in Chinese) survey and monitoring micro-blogs and listservs. The interview outline, survey, and site visit checklist I used are included in Appendix A. During the second trip I attended two conferences, the fourth national CSA Symposium in Beijing and the International Conference on Sustainability and Rural Reconstruction in Chongqing. Many of the individuals I interviewed on my first trip were present at these conferences and this gave me a nice

opportunity to ask follow-up questions. Each data collection method is described in further detail below. All of these methods were approved by the University of Waterloo's Office of Research Ethics.

2.5.2.1 Semi-structured Interviews

Semi-structured interviews, in contrast to written surveys for example, are useful at uncovering complexities of motivations behind actions (Mullings, 1999). However, completely unstructured interviews risk not eliciting information on the themes of interest. There were some specific topics I wanted to cover, but at the same time, I wanted to hear respondents' stories. Therefore, I used an interview guide (Appendix A) to help direct the conversation, while providing flexibility to probe further where necessary. A second advantage of a predefined interview guide in this situation is that the questions were translated into Chinese and provided to respondents at the interview. Interviews were recorded where permission was granted, although typically respondents asked that our conversation not be recorded. I spoke with people in English if they were comfortable, but most interviews were in Chinese with simultaneous translation provided by my co-researcher Zhenzhong Si or occasionally by another English speaking Chinese person who was present.

2.5.2.2. Site Visits

Wherever possible, interviews included site visits, although in a few cases, interviews occurred at one of the conferences I attended. Typically, there were at least two of us at every site visit. On the farms I visited, I used a simple checklist (Appendix A) to take note of the production practices that farm operators spoke to and that I observed.

2.5.2.3 Written Surveys

On the second trip, I prepared a written survey which was translated into Chinese, and distributed these to CSA farms. I recruited the farmers at the two conferences I attended. The English and Chinese versions of the survey are in Appendix A.

2.5.2.4 Blog and 'Buzz Mining'

'Blog and buzz mining', where internet posts are used as sources of research data, is still considered a new research method in the social sciences (Poynter, 2010). Best practices and ethical frameworks are still evolving. Given the conversational nature of blogging, scholars have found that monitoring a community's on-line exchanges can be similar to monitoring inperson conversations, noting that it can be particularly helpful in understanding the beliefs and practices of a particular community.

There is an evolving literature around 'on-line activism' specific to China. The growth of on-line communities, and in particular the use of micro-blogging has exploded in recent years (Yang, 2009). During my fieldwork, I learned how extensively AFN participants were using these online spaces, so I decided to monitor the 'Weibo' posts of 8 bloggers, described in Appendix B, for 4 months as supplementary data. 'Weibo' is an acronym for a networking service in existence since 2009. It is best described as a cross between blogging, as we understand it in the global north, and Twitter. The use of Weibo has exploded in the past few years and had over 100 million users by early 2011 (Yang, 2013). Weibo posts include anything from event promotion and distributing information to more political expression. The state censors Weibo for subversive content (Yang, 2013) and bloggers typically use pseudonyms to at least partially obscure their identity.

The bloggers I 'followed' were all people who were involved in the AFNs I studied and included one peasant farmer, CSA operators, buying club volunteers, farmers' market volunteers, and consumers. The blogs were all in Chinese, and they were translated by a graduate student at the University of Waterloo. I met most of the bloggers while in China. As per the University of Waterloo Office of Research Ethics approval (ORE 18011), I sought their permission to monitor their blogs, and they consented verbally. Where I did not meet the bloggers personally first, I notified them by email that I was a researcher reading their blogs and that I might quote them in my reports and asked them to respond if they had any concerns. No one expressed any concern about the blog monitoring.

There is a debate in the research ethics literature as to whether blogs and on-line discourse should be considered in the public domain, and hence 'cited' in the same fashion as

press references or other 'desk research'. Or, should these postings be considered a more private form of information sharing and hence subject to the same ethics considerations as other in-person types of qualitative data (Poynter, 2010). I treated contributions made in online space the same way as I considered contributions people made in interviews and used assigned numeric codes to mask identities.

2.5.2.5 Field Notes and Transcriptions

Following the 'verbatim principle' (Spradley, 1979) I tried to write exactly what was said in the voice of the speaker instead of interpreting or generalizing, although sometimes this was a challenge given the language difference. The research team tried to reach interresearcher agreement when we transcribed our field notes. Those of us present at the interview all contributed to a shared transcription and discussed areas of disagreement where they occurred.

2.5.2.6 Coding and Analysis

I used N-Vivo to complete the coding and analysis of the translated interviews upon return to Canada. N-Vivo is referred to as a code-based theory building software. Such packages assist the researcher in managing the analysis of qualitative data by supplying thematic coding to chunks of data and facilitating their clustering into themes (Peace & van Hoven, 2010). I generally used an iterative approach to coding that combined 'a priori' themes, informed by the lenses I discussed above, and those emerging from the data. In this way, data were 'read' along the four dimensions discussed above for associations and patterns.

2.5.3 Ensuring Research Quality

In a post-structural approach, in which the researcher is not seeking to discover 'the truth', the question of research quality is really about the trustworthiness or credibility of the data rather than whether the phenomena are adequately measured (Denzin & Lincoln, 2005). To this end, triangulation is a key strategy. Triangulation was used in four different ways in this study. First, I used theoretical triangulation by examining results using different theoretical lenses. Second, I used the multiple data sources outlined above to corroborate each other. Third, there were multiple cases or sources interrogated. Finally, there were typically at least

two researchers at the interview, and we worked collaboratively on transcripts, thus enhancing transparency and accuracy.

2.5.3.1 Respondent Validation

Reporting back to participants throughout the research process verifies accuracy, validates participant's time, expresses reciprocity with participants and further validates the research findings. There are various ways this can be accomplished ranging from showing all participants the entire narrative in draft form to only sharing the completed report (Denzin & Lincoln, 2005). I followed a middle ground approach to transparency, where I shared preliminary findings with a group of participants and others at the International Conference on Sustainability and Rural Reconstruction I attended in 2012. This gave me an opportunity to 'float' ideas and gave participants an opportunity to offer further details or contradict my interpretations. In addition, our research team distributed a written summary of findings to interviewees. These approaches further strengthen confidence in the conclusions by virtue of their having been considered by key participants.

2.5.4 Limitations and Cross-Cultural Challenges

Qualitative research generally, and case study research in particular, is difficult to execute according to definitive plan (Gibbert & Ruigrok, 2010). Decisions taken a priori often need to be revisited while in the field. A key aspect of research rigor is the transparency with respect to modifications in design and data collection in response to unanticipated setbacks. Turner (2010) discusses how socialist rule in three Asian countries, including China, plays a substantial part in shaping the experience of fieldwork. This section addresses the challenges of gaining entry, interpretation/translation and positionality with regard to the cross-cultural aspects of the proposed research.

2.5.4.1 Gaining Entry

In this research, my access to interviewees was facilitated through linkages between the University of Waterloo and Chinese academic institutions along with a lengthy list of key informants based on previous fieldwork by colleagues at the University of Waterloo as a starting point. From this initial list of contacts, we used a 'snowball' approach to identify other

key stakeholders in China's ecological and organic sectors, and to identify initiatives clustered into alternative food networks.

2.5.4.2 Interpreter Dynamics

Research assistants and interpreters drawn from the communities being researched are key resources, and it is important to note that their ability to embrace the subtleties of the content area as well as how their positionality can impact the research (Scott, 2006; Turner, 2010). Considering these challenges, this research was enhanced by our team approach, wherein two Chinese doctoral students generously translated interviews and materials. Further, we were able to discuss findings and meanings together continuously throughout the research process.

2.5.4.3 Situatedness, Positionality, Reflexivity

Drawing on the concept of 'situated knowledge' (Harroway, 1988), while I have outlined the efforts I have taken to ensure the credibility of this research, I also acknowledge that the interpretation I offer here is partial and incomplete. The interpretation I offer is specific to me and thus is limited by my positionality.

Researchers speak of entering and leaving the field as though there is a door that opens and closes, and we find ourselves in a different place. In reality, transitions are complicated and are both shaped by, and in turn shape, our identities. Positionality refers to the ways in which relationships are framed while in the field, and how this in turn effects the research questions, the inquiry process, content, and interviewee relationship with the interviewer, analysis and results. Reflecting on positionality can make the researcher more aware of, and attentive to, the power relations in the research process and the resulting impacts (Suzuki, 2007). In interrogating my own assumptions and biases that I bring to this research, my experience as a small-scale organic CSA farmer worked to my advantage generally. I think I was able to connect with AFN participants in fairly open and authentic ways. People were always interested in my experiences as an organic farmer running a CSA and selling at a farmers' market as well as in a buying club in Canada.

Yet throughout the research, I also became aware of some of my ideological presuppositions, or 'baggage' that I carry with this identity. In particular, there are two areas where I have changed because of the research. First, I have become aware of the way that I have viewed organic agriculture in the past from the lens of certification and standards, and the different ways of understanding organic that are possible. Interviewing people in China who contest the state's standards and are seeking to construct their own meaning of organic was something I was originally resistant about. I spent much time once back in Canada talking with other farmers about this theme to try to sort out my views, and in the end, I have emerged from the research process with a much more nuanced view of 'knowing' as well as growing food. Second, I have gained a much more generous understanding of what the dynamics of 'resistance' can look like. Before I began this research, I argued that alternative food as a market-based response would always face 'co-optation' and that the only solution was to strengthen our government's role in food policies through protest. Indeed, I've spent many hours writing letters, signing petitions, sending postcards and standing outside meetings with placards. I do not discard these strategies, but I have seen other more nuanced approaches to resistance in action, and I continue to think about these. I think there is much to learn from these Chinese AFNs in this regard, and look forward to trying to indigenize their 'everyday resistance' strategies here in Canada and add them to my resistance toolbox.

2.6 Researching Four Dimensions of AFNs in China

This chapter has outlined the ontological and methodological approach of this research. I described the evolution of the post-structural political economy approach as an over-arching philosophy that guides my inquiry. Nested within this, I outlined how a set of pervasive dualisms in AFN scholarship has prompted the consideration of these phenomena as co-constituted along four dimensions: economic, ecological, interpersonal and political. I then introduced four analytics or 'lenses' that I use to focus my literature review and analysis along these dimensions. Finally, I described how I approached fieldwork in China and the networked case study approach and data collection methods I used.

With the research approach and methods explained, Chapter 3 describes the emergence of AFNs in China's hybrid food system.

3.0 Emergence of Alternative Food Networks in China

Whether one refers to China's political economy as socialist, socialism in transition, post-socialist or socialism 'with Chinese characteristics' (Lim, 2013), the point of departure for my analysis is that China is a single-party state in the process of dismantling socialist institutions, opening its border to trade and reducing its intervention in markets. Yet at the same time, it is a 'strong state', maintaining control of socio-economic processes and trying to use redistributive mechanisms to address growing inequities driven by a historic concern for food and political security and pursuit of social harmony.

This chapter describes the appearance of AFNs in China. Before doing so however, I offer an overview of China's mainstream food system in which these alternatives are emerging. Of course, food systems are complex, and in many ways, one can consider the situation in China as multiple food systems operating at different spatial and social scales. However, my purpose here is to provide context against which I can consider AFNs. To this end, I sketch an overview of China's dominant food system, relying on country-wide information and statistics, which I acknowledge masks considerable social and regional variation. I paint a picture of a hybrid system, or what some refer to as a 'transitional' system (McCullough et al., 2008), that combines elements of both traditional and modern food chains, and is changing very fast.

In this chapter's second section once a general appreciation for the context is achieved, I begin the exploration of emerging food procurement alternatives to this mainstream system. Before moving to the analytical chapters and dissecting the economic, ecological, interpersonal and political dimensions of these alternatives, I use this chapter to describe how CSA farms, a new type of farmers' market, and buying clubs have spontaneously emerged in the past five years, primarily in the wealthier more developed areas of China, and become entangled in networked relations that I consider to be AFNs.

3.1 China's Food System: A Hybrid of Traditional and Modern

China has adopted a unique approach to neoliberalism, seeking to combine economic and trade liberalization with state authoritarianism (Wu, 2008). During the reform period, which commenced in 1978, two central agri-food policies have impacted China's food system's transition. First, in the early 1980s, China's collective agriculture system (which had been created in the Mao-era) was dissolved and individual farmers became largely autonomous decision makers which led the way to a privatized food market (discussed further in Chapter 4). Second beginning in the late 1980s, the state began supporting township and village enterprises (TVEs) as a main vehicle to absorb 'surplus' rural labour and drive economic growth. As a result of these combined policies, the economy grew, but agriculture fell from 40% to 11% of GDP, and the agricultural workforce fell from over 80% to 38% of the total workforce (Carter, Zhong & Zhu, 2012). Today, agricultural development lags behind the rest of the economy and farmers' incomes are increasing only slowly, which has led to a fast growing income gap between rural and urban areas (discussed further in Chapter 4). More recently however, and in particular since 2004, state policy has re-focused on agriculture and rural development. China's most recent five year plan for example, highlights environmental sustainability and investment in agricultural science and technology, and supports for more integrated food chains through co-operatives and contracting between farmers, processors and retailers (OECD-FAO, 2013).

Mirroring changes in the broader economy, China's food system has been described as transitional, or a hybrid of traditional and modern approaches (McCullough et al., 2008). It is a food system where a new structure of markets, different from the previous state-organized distribution, has partially evolved, but with less consolidation and integration compared to fully 'modernized' food systems of the global north (McCullough et al., 2008). Figure 3 offers a conceptualization of this hybrid system.

3.1.1 Changing Food Consumption Patterns

In only three decades, China's food system has moved from one based on rationing and grain coupons to one characterized by increasing choice, rising prices (Huang, Wang & Qiu, 2012) and growing concerns about food quality and safety (Yan, 2012). China is now the world's largest food and beverage retail market valued at US \$607 billion in annual sales

(Garnett & Wilkes, 2014). This growth is being shaped by increasing urbanization and the emergence of a middle class with changing food patterns. Over the last 30 years, per capita spending on food has been rising. Between 2000 and 2010, total spending on food has doubled, while food expenditure as a percentage of all expenditures has fallen from 49% to 41% in urban areas and from 39% to 36% in rural areas (Cao et al., 2013). Recent marketing research suggests China's food consumers can be grouped into four categories (Garnett & Wilkes, 2014):

- *Poor* those with incomes below US \$6,000 per year, representing less than 10% of the population
- *Mass consumers* those with incomes between US \$6,000 \$16,000 per year, who can afford basic things for a reasonable lifestyle
 - New mainstream those with incomes between US \$16,000 \$34,000
- *Affluent* those with incomes above US \$34,000 per year. At present, this group comprises about 6% of the population, but is projected to grow to over 50% by 2020.

China's food system transition is being accompanied by a nutrition transition and economic reforms have resulted in dramatically changed food consumption patterns. Analysis of the recent China Health and Nutrition Survey (CHNS) reveals striking trends (Popkin, 2013):

- increased consumption of oils and increased frying of food
- increased consumption of animal-sourced foods, wherein pork remains the most common animal-sourced food, but the intake of eggs, poultry and dairy products are all rising quickly
- increased consumption of sugar sweetened beverages, which were non-existent prior to 1989, but have recently entered the Chinese diet as global beverage companies have expanded markets
 - decreased consumption of grains and legumes
 - increased consumption of food away from home
- increased consumption of non-traditional foods, in particular confectionary and frozen foods

Indeed the only truly healthy trend revealed by the CHNS is the reduction in sodium intake, resulting from better refrigeration and therefore declining salted fish consumption (Zhai et al., 2014). As would be expected given these trends, chronic disease rates such as obesity, diabetes, stoke, heart disease are rising in tandem (Garnett & Wilkes, 2014).

Food consumers are generally excited about diversifying food choices, greater food availability and moving from season bounded choices regulated by the state (Veek, Yu & Burns, 2010). Indeed, there is little evidence of anti-globalization food boycotts, with some scholars suggesting that the link between ethics and consumption has not yet made it to China (Gerth, 2003). Boycotts of global products or retailers that have occurred have typically had a nationalistic bent, linked to the ways in which the companies have portrayed Chinese traditions in their advertising, rather than social, ethical, ecological concerns that characterize boycotts in the global north (Dong & Tian, 2009; Nyiri, 2009). However, in recent years, food safety has become a focal issue and consumers are pursuing better food quality. Chinese consumers understand food safety broadly to include not only food produced under sanitary conditions and unadulterated by additives, but also food that is free from environmental pollutants and agricultural inputs such as antibiotics and pesticides (Holdaway & Husain, 2014; Yang, 2013). This concern with food quality is a significant factor driving the emergence of the alternatives that are the focus of this research.

'McDonaldization', 'supermarketization' 'walmartizaton' and other such processes that reflect the global experience of bigger, faster, cheaper, homogenized food products, coexist with China's traditional food system. Yet, there is a distinct 'glocalization' to their presence in China, as these global giants incorporate elements of local culture into their practices (Matusitz & Leanza, 2009). What happens when the world's biggest corporation meets the world's biggest food economy? The numbers are mind-boggling. For example, if it were a nation, Walmart would be China's eighth trading partner (Matusitz & Leanza, 2009). The ways in which Walmart has needed to adapt to Chinese food preferences illustrates the draw of this market. For example, Walmart has catered to preferences for daily shopping and

⁴ Recent nationalistic boycotts have been levelled against Carrefour, Coca-Cola, McDonalds and Starbucks for example. See Nyiri (2009) for a full discussion.

fresh foods by adding extra floor space for perishables, and tanks for customers to fish for themselves for everything from frogs and snakes to puffer fish (Matusitz & Leanza, 2009). Since consumer preferences are quite regional in China, Walmart does not use central purchasing as the fresh foods in each store reflect local cuisine, necessitating sourcing from 20,000 local farms and processing firms (Matusitz & Leanza, 2009). Further, China is the only country in the world where Walmart has been compelled to have a labour union (Chan, 2011). It seems that globalization of China's food system has mixed effects given the strong control maintained by the state, as well as strong culturally-driven food preferences and practices. Looking at impacts of the reform and 'opening' across the food chain can help unpack further details.

3.1.2 Food Chain Transition

Despite making a declining contribution to the country's overall economy, the agricultural output from China's farmers grew 4.5 times over the reform period (Huang, 2011). Two hundred million small scaled farms sell products through a complex system of formal and informal mechanisms to bring products from villages to diverse markets and retail formats (Garnett & Wilkes, 2014; Huang, 2011). Figure 3 depicts how products are aggregated through structures such as dragon-head' enterprises⁵, specialty co-operatives and government-run wholesale markets. The system is largely unquantified and fragmented (Huang, 2011), but recent estimates suggest that one-third of farm households use one of these three formal structures, while the remainder rely on uncharted systems of petty-traders, small wholesalers, transporters and other intermediaries (Huang, 2011). While the food system remains largely traditional, modernized structures and institutions are rapidly evolving. A comparison of the horticultural and livestock sub-sectors, for example, demonstrates the hybrid or transitional nature of China's food system and the co-existence of traditional and modern structures. The livestock and dairy sectors are achieving greater outputs through farm and processing consolidation. These sectors are increasingly relying on imports of feed, primarily soybeans, in order to meet growing domestic demands for animal-based foods (Huang et al., 2012). The horticultural sector has also increased its productivity, so much so that beyond meeting rising

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⁵ Typically subsidized firms that hold private contracts with smallholders for specific crops and also usually provide necessary inputs to them (Huang, 2011).

domestic demand for fruits and vegetables, China's small vegetable and fruit farmers produce for export. Output of fruits in particular grew almost 30 fold since 1980, relying not on firm and farm consolidation, but rather on the complex traditional intermediaries described above (Huang et al., 2012).

There are also changes beyond the farm gate in processing. A strong domestic processing sector exists, with dairy, bakery and dried processed foods as its leading industries (Garnett & Wilkes, 2014). Yet, as with the production sector, the processing sector illustrates the contradictions of modern and traditional systems in co-existence. On one hand, agricultural processing remains dominated by small firms. In 2007 for example, China's food processing sector included more than 448,000 firms, of which almost 353,000 had fewer than ten employees (Holdaway & Husain, 2014). On the other hand, vertical integration and consolidation is evident. For example, in 2010, 27 Chinese processing firms had sales over US \$1.65 billion (Garnett & Wilkes, 2014). The most recent Five-Year Plan seems to direct state support toward modernizing processes. For example, it seeks to promote large-scale enterprises with output values of over US \$1.65 billion and includes policies that set minimum sizes for livestock processing facilities such as abattoirs (Garnett & Wilkes, 2014).

Foreign direct investment in China (FDI), growing to over US \$2 billion in 2010 is helping to drive China's processing sector (Garnett & Wilkes, 2014). While this is still small in relation to the overall value of the processing sector in China, it illustrates that overseas firms are starting to play key roles in agricultural processing (e.g. ADM, Cargill, Bunge and Wilmar), food manufacturing (e.g. Nestle, General Mills, Coca-Cola, Pepsico, Danone, Heineken), and food services (e.g., Yum! Foods, McDonald's) (Garnett & Wilkes, 2014).

3.1.3 Food Retail Transitions

The food retail sector in China also illustrates the co-existence of traditional and modern structures. While wet markets and traditional marketing chains remain dominant, trends suggest that supermarkets are growing faster than elsewhere, with estimates ranging between 10% and 30% growth per year depending on the region (Reardon, Timmer, Barrett & Berdegue, 2003). In urban areas, consumers make about one-third of their food purchases in

supermarkets, which is significantly lower than more developed food economies (Hu, Reardon, Rozelle, Timmer & Wang, 2004). However, it is revealing to unpack these sales. In China's largest cities, supermarkets provide most of the processed foods and dairy foods (79% and 60% respectively) but only 50% of rice, 46% of meat, 37% of fruits and 22% of vegetables (Garnett & Wilkes, 2014). Therefore, while supermarkets are expanding, most consumers still prefer to purchase foods, especially meats, fruits and vegetables, in traditional wet markets, where pettytraders re-sell food purchased from large wholesale markets. Nonetheless, food chains are distancing and wet markets are declining in importance (Suk-Ching, 2005), largely because of state intervention. In the 2000s the state began to replace state-run wet markets with privatized wet markets (Zhang & Pan, 2013) and modern supermarkets in efforts to improve hygiene by ensuring public health and labelling standards, adding toilets and washrooms, and upgrading storage and display facilities (Zhang & Pan, 2013). It is also interesting to note that modern retail approaches frequently embrace traditional styles of vending. Supermarkets and hypermarkets⁶, for example, have large produce and seafood sections where consumers can closely inspect food as in a market, cater to consumer demand for local cuisine and specialties by using local suppliers, and sometimes include market stalls into the design of the store (Garnett & Wilkes, 2014).

3.1.4 Global Integration and Food Prices

China, with 21% of the world's population but only 9% of the world's arable land, is widely described as essentially food secure (Carter, Zhong & Zhu, 2012; Christiansen, 2009; Garnett & Wilkes, 2014; Huang, Yang & Rozelle, 2013). As revealed by the story of the mandate of Heaven that began this dissertation, dynasties have risen and fallen based on their capacity to achieve harmony through food sufficiency. As an illustration of the central positioning of food security, China maintains the largest public reserves⁷ of grain in the world, comprised primarily of wheat and rice (Morton, 2012), a sugar reserve (Garnett & Wilkes, 2014) and a living pork reserve (Schneider, 2011), and manipulates all of these to moderate food prices.

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⁶ The term 'hypermarket' typically refers to a large store that combines a food supermarket with a more general department store.

⁷ The size of these reserves is the subject of much speculation. In 2007 the state announced it held reserves of 200 million tonnes, or 30 - 40 percent of its total grain production for that year (Morton, 2012).

However, in the past 30 years, and especially following accession to the World Trade Organisation (WTO) in 2001, China has become increasingly integrated with world food markets and this has complicated its food security picture. For example, from 1980 to 2010, food exports rose from 6% to 24% of GDP, and food imports rose in almost exactly the same pattern from 6% to 27% GDP (Garnett & Wilkes, 2014). China exports primarily labourintensive fruits and vegetables and imports large quantities of land-intensive products primarily for animal feed (Garnett & Wilkes, 2014). In 2010 alone, China bought almost 50 million tonnes of soybeans for livestock feed (Morton, 2012). In addition to soy, China imports significant quantities of palm oil, raw sugar, rapeseed, powdered milk and other processed foods. China's strong historical position on food security and its ability to protect itself from global price fluctuations are reflected in its National Development and Reform Commission report on food security. In reference to the 2008 global food price crisis, the report states, "the world food market caught a cold, but China did not even sneeze" (cited in Morton, 2012, p. 20). When prices began to rise in 2007 the state flew into action. It released grain from its reserves, negotiated key future contracts with trading firms in exporting countries, banned exports of food and feed, added export taxes to fertilizers to hold onto its supply, provided subsidies and insurances to its producers and extended a food price subsidy⁸ to low income urban consumers and students (Huang et al., 2013). With these measures, China successfully kept domestic prices from rising as much as international prices, with the exception of soybeans, where China's import position, and absence of reserves to release, continue to leave it vulnerable to global price fluctuations (Huang et al., 2013). If not a full sneeze, it was at least a sniffle, but the state found the tissue fast.

Notwithstanding the state's intervention, China's domestic food prices at the end of 2010 were again up 9.6 %, while consumer prices generally were up only 4.6% from 2009. This time, noting that the increase in food costs could be primarily attributed to rising labour costs in the horticultural sector, the state responded again with supports for low income

⁸ The subsidy varies by region, but on average, in March and June of 2008 for example when food prices increased, all university students received a 20 yuan (US \$3.20) cash subsidy per month. It is applied whenever the consumer price index exceeds 5% for three consecutive months (Huang et al., 2013).

consumers and reductions in tolls for trucks carrying produce (USITC, 2011), demonstrating again its ability and willingness to maneuver multiple policy leavers to moderate food prices.

3.1.5 A Food System in Transition

In conclusion, China's food system can be thought of as a hybrid system, where traditional production, processing and retail practices intermingle with modern firms and institutions. Diets are shifting to include more animal-based foods, but for the present, vegetables and grains are dominant components. Consolidation is evident in the livestock sector, but the horticultural sector remains dominated by small farms, and multiple intermediary structures (Huang, 2011). Retail remains diversified, and consumers prefer to patronize upgraded wet markets for fresh products. The system is increasingly integrated with global markets. The state, motivated by strong concern for harmony and food security, has demonstrated its willingness and ability to act quickly and decisively to control domestic food prices. It is in this contradictory landscape that AFNs have emerged.

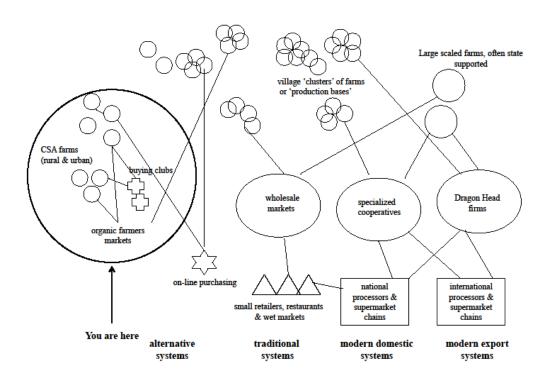


Figure 3: Conceptualization of China's Hybrid Food System

Source: Adapted from McCullough, et al., 2008

3.2 The Emergence of AFNs

The AFNs under study are comprised of three different types of initiatives brought into assemblage, and I describe each of these below. As shown in Table 2, 19 initiatives have been included in this analysis (15 CSA farms, 2 farmers' markets and 2 buying clubs). Throughout the remainder of my analysis, I refer to these only through code numbers in order to mask their identities as promised in my interviews⁹. As shown in Figure 4, these cases are widely dispersed across the more industrialized and populated areas China. As an introduction to these AFNs, this section provides an overview and tells the story of how CSAs, farmers' markets and buying clubs emerged and became interrelated before interrogating their economic, ecological, social and political dimensions.

Table 2: Cases Examined

	Community	Farmers' Markets	Buying Clubs		
	Urban Operators	Rural Operators	NGO/University	Beijing Organic	Green League **
			Supported	Country Fair **	Green Heartland **
Large (200 Shares and over)	Shared Harvest ** Garden of Eden * Little Honeybee * Green Cow **	Public Rights *	Big Buffalo** Little Donkey ** Anlong Village **	Chengdu Market **	
Small (Under 200 shares)	Derun Wu ** Phoenix Commune* Listen to the Creek * GuiPu * Green Arc *	Field Wind * Jia Mei *			

Source: this author

*Information is drawn primarily from one source – either an interview or a survey

**Information is drawn from multiple sources – site visits, interviews, surveys, on-line blogs

 9 I have not attached an interview date to each individual quote. As noted below, interviews occurred in either April or November 2012.



Figure 4: Locations of AFN Cases Studied

Source: this author

3.2.1 Motivations for AFN Initiation - A Typology

The initiators and organizers, as well as the members or buyers in the CSAs, farmers' markets and buying clubs in these AFNs, are primarily ¹⁰ a group I will refer to using the label 'middle class'. However, in doing so, I acknowledge that this is a highly debated and contested status in China, with contrasting views on its composition, characteristics, identities and political views (Li, 2010). Yet, many of the individuals I interviewed used this term to describe themselves and their members or buyers (FCSAB6, BCB1, and FMB1). As detailed in the descriptions of CSAs, farmers' markets and buying clubs that follow, AFN initiators are generally young people, born after 1980, and therefore raised after the 'reform and opening' to the west. So, they never experienced famines, collectivized farms, food rationing or rural

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¹⁰ There are some notable exceptions to this that will be highlighted in this thesis. In particular, in Chapter 4, I discuss how some of the CSA farmers who would be characterized as rural, peasant farmers are integrated into these AFNs to a certain degree.

hardship of the Mao era, as their parents likely did. The AFN organizers I interviewed tended to be university educated and connected to the world through the internet and often extensive personal networks. They are not the wealthiest group of consumers in China, but nor are they the poorest. One of the most salient aspects of the CSAs, buying clubs and farmers' markets that comprise China's AFN movement is that the motivations and ethics of the *organizers* can be contrasted with those of the *members or consumers* with whom they are trying to forge connections. Table 3 offers a typology of China's AFNs, based on dimensions typically addressed in global north scholarship. It illustrates, how motivations and ethics with respect to participation in AFNs differ along a continuum of producer-consumer identities.

The initiators of China's AFNs are driven by diverse motivations. A desire to support their livelihood intermingles with more egalitarian motives. They are concerned about the marginalization of peasants in rural China, and seek to re-connect with the rural by re-kindling lost food and farming traditions, and to re-connect urban consumers with land and food production. Primarily urban born, they have limited direct experience with China's traditional peasantry, yet they feel sympathetic with its problems, and see food initiatives as a way to assist. Second, AFN initiators are concerned about environmental issues and some work in collaborative relations with environmental NGOs. They seem strongly motivated by the traditional Chinese pastoral and idyllic imaginaries, and lament the loss of traditions and food skills that is accompanying the modernization of the food system. Third, they are concerned about the safety of the food supply and see this as a growing 'crisis' in China, and a primary way to engage with, and broaden the awareness of others.

In comparison however, as shown in Table 3, members and buyers who engage with China's AFNs, most likely share only the concern for food safety with the AFN initiators. Most are not particularly motivated by environmental concerns. Nor are they necessarily seeking relationships with producers. Nor are they motivated to improve the plight of peasant farmers. Indeed as discussed in Chapter 6, many AFN participants distrust China's peasantry, and it is an ongoing challenge for AFN organizers to engage these consumers in broader food justice and environmental issues. Yet AFN organizers know their own motives are different from

those of many of the other participants in these networks, and as will be detailed, they continually act to draw others into deeper connection in the networks.

A unique feature of the CSA farms in these networks, and one of the ways that 'self-interested' CSA members are drawn into deeper connections, is through the practice of 'weekend farming'. Almost all of the CSAs I visited, embraced a type of agri-tourism in which they rented plots on the farm to their members who wished to grow their own food. As shown in Table 3, the motivations of this group of participants, as with the motivations of AFN organizers, extend beyond merely food safety, although they do not have the same broad egalitarian motivations as most of the AFN initiators. For this reason, the typology in Table 3 suggests that there are multiple organizer/initiator identities as well as multiple producer/consumer identities becoming entangled in these networks. The sections that follow, take a closer look at the initiation and emergence of CSAs, farmers' markets, and buying clubs that comprise these AFNs.

Table 3: Typology of China's AFNs: Motivations for Involvement

Dimension	Motivations ¹	Producer – Consumer Continuum				
		CSA Operator (N=15)	Farmers' Market Organizers (N=2)	Buying Club Organizers (N=2)	'Weekend Farmers' (N=45) ²	Buyers ³
Economic	Support own livelihood	***	*	*	*	
	Affordable food for family	*		*	*	
	Local economic development	**	**	*		
Ecological	Food quality/safety/health	***	***	***	***	***
	Protect the environment	***	***	***	*	*
Social	Re-connect with producers & food traditions	***	***	***	*	*
	Re-connect with nature	***	*	*	***	*
	Have fun, make friends	**	***	*	***	
Political	Social justice concerns for peasants	**	*	*		

Source: modified from Si, Z., Schumilas, T., Scott, S., forthcoming

¹Weak (*) – mentioned by 2 of the CSAs or weekend farmers, 1 of the buying clubs or 1 of the markets Moderate (**) - mentioned by at least 3 of the CSAs or weekend farmers

Strong (***) – mentioned by more than half of the CSAs or weekend farmers, both of the buying clubs or both of the markets

² Based on a secondary analysis of 45 interviews conducted with weekend farmers by Chen (2013a)

³ Based on reflections of AFN organizers, newsletter contributions and blog monitoring.

3.2.2 Community Supported Agriculture Farms (CSAs)

One of the difficulties in estimating the number of CSAs in China is that this term is being widely used as a branding or marketing label. While doing internet research to locate CSA farms to visit, I found that many on-line ordering stores refer to themselves using the English acronym CSA. So while this might describe a small-scale farmer who enrolls members in a way quite similar to the global north understanding, it could also describe a much larger business that aggregates product, that may or may not be ecologically produced, from multiple farms and makes this available through quite sophisticated on-line storefront operations. Given this confusing landscape, I developed an operational definition of a CSA as an initiative where an operator (either a peasant farmer or an urban resident) sells products from land that they themselves manage, to an established group of buyers. Thus, I excluded cases where consumers ordered on-line from a list of options without direct contact with the CSA operator, and with no possibility of visiting the farm.

CSAs began developing in China in 2008, and participants in this research estimated there are between 80 – 200 CSA farms today across the country (FCSAB4)¹¹. Even if this is an over-estimate, the growth of CSAs has been fast, considering that in Ontario it has taken 30 years to reach an estimated 200 CSAs (Schumilas, 2011). As further illustration of this growth, CSAs in China have held their fifth annual conference with attendance from CSA operators in Beijing, Shanghai, Shenzhen, Guangdong, Guangxi, Chongqing, Sichuan, Fujian, Liaoning, Shandong, Shaanxi, Zhejiang, Hunan, Hubei, Inner Mongolia, Henan, Hebei, Yunnan and Guizhou.

There are competing versions of which CSA farm was the first in China. Three of the operators I interviewed made this claim. Regardless, it is clear that the CSA approach was 'imported' from the global north versus appearing as an indigenous development. The English acronym CSA is typically used in discussion and promotion of the model because the translation is not straightforward. The word 'community' in Chinese generally refers to a location or neighbourhood. So the use of the word (as in Community Supported Agriculture in

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 $^{^{11}}$ I heard vastly different estimates of the number of CSAs in China, reflecting the uncertainty of exactly what to count.

English) to denote a community of affiliation, does not translate easily into Chinese, and requires much additional explanation. Instead, Chinese CSA operators are using the term *shequ huzhu nongye* which literally translated means 'peasant in mutual relations with urban residents'.

CSAs take remarkably diverse forms in China, and operate as rural peasant-run farms, entrepreneur-led urban businesses or not-for-profit projects. The economic dimension of these CSAs is examined more closely in Chapter 4. Many of these CSA farms were initiated by young, educated individuals, with 11 (74%) of those I interviewed having completed post-secondary education. This group has been described as China's 'new peasants' 12. Most operators (92%) cite consumer concern for food safety, food quality and health, followed by environmental concerns (75%) as motives for starting the CSA. The CSA movement seems to draw primarily on the growing numbers middle class consumers in urban areas (Shi, Cheng, Lei, Wen & Merrifield, 2011). As one CSA operator explained, membership in these CSAs can be summarized as falling into three consumer groups: "wealthy urban white-collar workers, managers of companies who buy food as gifts, and pregnant women and parents of young children" (FCSAB4).

There is a significant group of NGOs and academics associated with these CSAs. They provide advice, workshops and training, as well as extending reputational benefits and *guanxi* (discussed further in Chapter 6). For example, Professor Wen Tiejun, a previous Dean of the School of Agronomics and Rural Development at Remnin University and former advisor to the state council on rural development, has been a strong advocate of the CSA approach in the context of China's rural development (Pan & Du, 2011; Shi et al., 2011; Wen, Lau, Cheng, He & Qiu, 2012). A few NGOs have also been important catalysts for CSAs in China. The Hong Kong-based Partnerships for Community Development (PCD) for example, has taken a leadership role in starting and promoting CSAs.

¹² The term 'new peasants' was adopted in the title of the 3rd National CSA Symposium in 2011: "New peasants, new city and countryside". News reports have also described CSAs in China as a 'new peasant movement' http://www.bundpic.com/2011/06/14788.shtml.

Table 4 outlines the sizes and share structures of the CSAs I studied. As shown, the size of these operations ranges considerably, making it difficult to refer to a typical case. CSA farm sizes range from 1 to 13 acres¹³, producing between 3 – 400 shares or an intensity of between 3 – 67 shares per acre. Pricing of shares is typically based on weight of vegetables and ranges widely from \$2.00 to \$10.00 per kg. Most CSAs only sell products grown on their own operations with very few products being purchased from other farms for re-sale. Most sell produce over a a 26 week season, with a few drawing on extensive greenhouse production and storage vegetables for year round sales. All of the CSA cases I examine here use multiple channels to distribute their products to consumers in addition to their members, and this results in their entanglement with buying clubs and with farmers' markets. Most (75%) CSAs I examined participate in farmers' markets and almost half (42%) are involved with buying clubs.

Table 4: Summary of China's CSAs (N=15)

	Range	Average	Median
Number of acres	1 – 13	6	6
Number of shares offered	3 - 400	3 – 400 180	
Number of shares per	3 - 67	27	25
acre			
Cost per week (\$ US)	\$10 - \$60	\$32.50	\$30.00
Number of salaried	2 - 32	14	12
workers			

Source: this author

On my site visits in April 2012, I observed several typical CSA shares being assembled. The season was just beginning on most of these farms, but greenhouses were entering full production and shares included many kinds of leafy greens, bok choys, Chinese cabbages, mushrooms, and Chinese chives. CSA operators explained that other fruiting vegetables like bitter melons, tomatoes, eggplant, as well as root vegetables like potatoes, carrots, daikon, onions and garlic would be included in shares later in the season, but that always the core content would be the leafy greens popular for stir frying. In addition to the

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¹³ I will report all acreage in acres (versus Chinese *mu*) and all monetary figures in dollars (versus Chinese RMB) for ease of reference and comparisons.

vegetables, most of the CSA farms included eggs, pork and/or chicken as supplemental foods that could be added to the share.

While CSA produce is usually delivered to drop spots or homes, consumers remain closely linked to the farm and this differentiates these farms from others in the mainstream food system. CSA operators interact extensively with their members and try to foster a sense of community in diverse ways. All encourage members to visit the farm, contribute to newsletters, attend social events, and most see themselves in an educational role. Typically the focus of these events and activities is around re-connecting urban consumers to traditional food skills and practices through workshops (FCSAB4, FCSAB1).

While each CSA has its own unique mix of products and pricing, and there is diversity in sizes and styles, these should not be considered as atomistic farms. Indeed these operations are interconnected in multiple ways. I was surprised at the strength of the connections among and between CSA operators, farmers' markets and buying clubs in China, especially considering these AFNs are only just beginning to form. Each individual operator routinely referenced the others and dozens of media articles and on-line directories list the same group of networked farms, markets and buying clubs. Many of the same farm operators were present at meetings and conferences I attended. Indeed, I continually had the sense of being part of an energetic and inclusive grassroots movement that was thirsty for new members, new connections and new information. These connections are perpetuated by the use of Weibo micro-blog, where daily on-line postings are used to disseminate information about events and activities. Indeed China's CSAs are interconnected in multiple ways, and their connections to the farmers' markets and buying clubs provide further illustration of this.

3.2.3 Organic Farmers' Markets

The type of farmers' market I examined has only recently appeared in Beijing, Shanghai, Chengdu and other large cities. In contrast to traditional 'wet markets', where petty-traders bring products from large wholesale markets to smaller urban markets for re-sale, in the markets I studied, farmers sell directly to urban consumers. These markets are promoted primarily through social media sites and are attracting thousands of people who come to buy

organic food directly from farmers. I included two of these markets, sometimes referred to as 'country fairs', in my research.

The story of how these organic farmers' markets began in China illustrates the interconnectedness in China's emerging alternative food movement and its linkages to foreign NGOs. With growing concerns about food safety in China (discussed in Chapter 6), consumers are looking for ways to re-connect with food, and foreign NGOs (notably the Institute for Agricultural Trade Policy) have helped to introduce organic farmers' markets where buyers and sellers meet directly as a new option (FMB1). In 2007, Chengdu Urban River Institute, a Chinese NGO focused on protecting water resources, in collaboration with Partners for Development (PCD), an NGO from Hong Kong, started a new urban farmers market as a way to encourage rural peasant farmers to shift to more ecological growing practices. Their vision was for a type of farmers' market where smaller scaled ecological producers and consumers could re-connect in direct ways. Ironically, an entrepreneur who identified the profit potential in this early attempt shaped the market by introducing large scale organic manufacturers and it became impossible for small farmers to compete, and the market lost the form that was originally intended (FMB1).

Influenced by this experience, in 2008, several small ecological farms operated by urban entrepreneurs on the outskirts of Beijing started to rotate hosting markets on their farms. From that experience, three CSAs worked together to launch the first market in association with Chinese traditional spring and harvest festivals. These small markets were held only twice per year, and were limited to CSA members and immediate networks of the participating farms.

In 2010, Zhang Yinghui, a Chinese freelance writer who focuses on green living and organic food in Beijing, saw the potential to expand these markets by linking them to other artisans. One particular artist, Emi, who lived in Canada at the time (and was indeed the way that I first learned of the existence of these organic markets and the associated CSAs) and worked at one of the CSAs, saw this potential and began organizing more frequent markets which included both farms and artists (Hunt, 2011).

Chang Tianle, a Chinese woman working on contract with the Institute for Agriculture and Trade Policy (IATP), joined this fledgling market movement. In particular, Ms Chang saw the potential in linking this emerging market movement to the Weibo micro blogging system, which was rapidly expanding in urban China at that time. The result was explosive, with over 300 consumers following the market posts on the first day of the account opening. The market had now clearly moved beyond artist links and initial expatriate visitors, to an independent platform, focusing on Chinese consumers. Indeed, in 2012, the Beijing Organic Country Fair won two food innovation awards (FMB1). Market operators surmise that receiving these awards, both considered quite prestigious in Beijing, means that: "The majority of the society and even up-class level cannot ignore this grass root activity. Of course, this honor doesn't only belong to Beijing market, but also it belongs to all the small-middle farmers and the consumers who support them all over the country" (FMB1).

Today there are farmers' markets similar to this in Chengdu, Guangzhou, Shanghai, Tianjin, Jinan, Hangzhou, Nanjing, Xian, Changsha, Shenzhen, Xiamen and Kunming. They are consumer-led, volunteer operated networks which offer a regular venue through which ecological, small scaled and artisanal producers can sell their wares and connect directly with consumers. On the day I visited (April 3, 2012), the Beijing market featured vegetables, fruits, pickled foods, eggs, milk, chickens, homemade rice wine, cheese, jam, sausage, bread and crackers, and non food handcrafted items like soaps. Markets operate at least once a week, sometimes more frequently. They do not have a fixed time and location schedule. Rather, they advertise their next appearance through Weibo. The market in Beijing works with a network of over 100 farms (FMB1) to draw in a wide range of products year round, with an average 40 vendors at each market.

The markets do not limit themselves to certified organic products. Their promotional material explains their perspective:

Many of the farmers at Country Fair have not undergone organic certification.

Domestic 'green' and organic standards are complex and receive limited trust and recognition among consumers; and obtaining certification is usually expensive and difficult. However, the farmers participating in Country Fair all share goals of

producing safe, healthy food through cultivation practices that support human and environmental wellbeing. At least one of the Country Fair organizers has visited each of the farms in attendance. These farmers are our friends, and we trust them. (FMB1)

The markets have faced critique from officials with regard to their adoption of the 'organic' language; since the state's organic, regulation prohibits the use of the term as promotion of products that are not certified. Around the country, these markets have been shifting their use of the term 'organic' given this uncertainty. This touches upon a debate within China's AFNs about certification and standard setting processes, and is discussed further in Chapter 5.

Both the markets I examined were initiated in order to reconnect producers and consumers around ecological production. For example, the mission statement of the Beijing market states:

Our mission is to support sustainable agriculture and rural-urban mutual aid to create a platform for exchange and education and a space to buy safe, healthy food. We hope to support farmers who are already growing organic, and to encourage other farmers who might be interested in making the transition. By bringing the rural bounty to our urban environment, we hope to help connect people with their food beyond the kitchen table directly to the earth and people that tend it. (FMB1)

In Beijing, the market organizers also spoke about a vision for ecological sustainability, and while the term 'food sovereignty' was never referenced, they also talked about the marginalization of peasant farmers and their desires to build stronger urban-rural and consumer-peasant connections. However, they recognize that in present day China, consumers are motivated by food safety concerns and not these "larger more philosophical themes" (FMB1), referring to my questions about peasant marginalization. Market operators believe they are strategically using the consumer pursuit of safe food as a "window" through which consumers will gradually connect to broader food and environmental justice themes. They see

food safety as the entrance into the discussion of environmental and social justice in China but clarify that this window "only remains open if the markets can be fun and social places" (FMB1). In addition, these farmers' markets are moving to fill what they perceive to be a void in training and extension work. After interactions and visits to hundreds of farms, they saw that there is a lack of support for ecological production. One response, in 2012, was to arrange for a trainer in ecological approaches to visit from Canada and offer workshops.

The Beijing Farmers Market is the largest of these markets in China and regularly attracts between 1000 – 2000 visitors and has sales of US \$2,400 - \$4,000 at each weekly market. Vendors see these markets as important marketing opportunities, hoping to also draw customers for CSAs and on-line sales. Vendors do not pay a fee for a booth at the market. In order to sustain market operations (space rental, promotion and costs in transportation to visit potential vendors), market volunteers make and sell some products at the markets. Proceeds are re-invested into market operations as well as charitable and/or educational projects. In Beijing for example, the funds raised by the market in 2012 were awarded as scholarships for farmers to attend workshops on ecological growing which the market organized. In Chengdu, for example, a 10% markup on market sales is used to purchase organic food for low income families in the area.

While the organizers feel that there has been remarkable progress in the development of this new farmers' market "platform" (FMB1), they are quick to add that further development is constrained by the lack of appropriate regulations and policies in China. For example, for each market they organize they need to register with three different government agencies (police, community committee and city manager), and an official will attend and report back to the government on the market's activities (FMB1). Both the Beijing and Chengdu market organizers felt that the markets are in a "grey zone" (FMB1, FMC1) of government policy and hence can be considered politically sensitive. Organizers are cautious to avoid any direct confrontation with government rules. For example, one market organizer commented, "we also worry that the government will ban the market someday..... Our 'grey' status will hamper our ability to make our own voice" (FMB1). Market organizers have begun to discuss the need to formalize the structure of the market. They feel that the current informal networked structure

poses challenges that limit expansion. To date however, the Beijing Organic Market organizers are caught by a lack of appropriate institutional structures in the Chinese legal landscape. They have rejected the idea of registering as a business, which is the dominant institutional structure supported in the current legal framework. Business registration would give them legitimacy and "grease bureaucratic wheels" (FMB1). However, in contradiction to the business model, the market volunteers want ownership to be shared and profits to be reinvested, and they have found registering as an NGO to be an "almost impossible" process that is not likely "worth the effort" (FMB1). As a result, the Beijing farmers' market has been evading bureaucracy by not pursuing any official status. It moves its locations each week and partners with other organizations that can 'host' the market under the auspices of their registration. Market locations have included department stores, academic campuses and shopping malls. A face book page and Weibo posts announce the market location every week such as, "Sunday market is back at Daystar" with a time, a map, and public transit locations.

3.2.4 Buying Clubs

The changing landscape of regulation in China, and the associated vulnerability grassroots organizers feel, is also reflected in buying clubs that are emerging as part of China's alternative food landscape, as a less formalized platform for connecting producers and consumers. In this research, I explore examples of buying clubs in Beijing and Chengdu, which source food from CSA farmers in those areas and are entangled in the same networks as the farmers markets. In both of these examples, motivated by procuring healthy food for their own families, a group of women came together to figure out the kind of food they wanted, and to find the farms that would produce it. However, in both cases the buying club is more than simply a purchasing group. They also assume an educational role, and as the analysis will reveal, have also have adopted an activist stance that is critical of the state-developed organic label.

In Beijing, the buying club evolved from a reading club in 2010, when a group of mothers became concerned about the quality and safety of food in supermarkets (BCB1). Six women decided to work together in a partnership to source organically produced food. They source food from farms which they visit and inspect, and use a small rented office space to

divide up the goods for delivery. They add a percentage to the fee in order to cover delivery and office space, but no one is paid a wage. The second buying club example, in Chengdu, dates to 2007, when a group of urban residents met a group of early CSA farmers. As with the farmers' market initiation, NGOs played an important role in the evolution of the buying club. The same two NGOs, Chengdu Urban Rivers Association, and Partnerships for Community Development, brought farmers and urban consumers together, and they gradually formed a buying club. The club delivers food boxes 25 weeks of the year to several hundred members (BCC2).

The buying club program operates like a group-purchased CSA share. The organizers speak with local farmers to see what is available, and then place and order for their members and arrange for delivery. On the day I visited the Beijing buying club, I watched as the volunteers divided the produce they had received (numerous kinds of leafy greens, Chinese lettuce and cabbage, bok choys, chives and daikon radishes) into shares for their members. Members came to pick up their share, and shopped for additional items from a small collection of dry goods (organic rice, tea, cooking oils). Some members sat in a quaint reception area to enjoy tea and browse a collection of ecological agriculture books, cookbooks, and self-help books. At one point, I felt quite nostalgic noticing copies of *Diet for a Small Planet, Farmers of Forty Centuries, Small is Beautiful* and *Silent Spring* in the collection.

As with the CSAs, and the farmers' markets, both organizers and members of the buying clubs are primarily educated middle-class consumers, motivated by food safety concerns and seeking to procure healthy food for themselves and their families (BCC1, BCC2). Also similar to the farmers' markets, both of the buying clubs I interviewed have rejected registration as a business, leaving them in that same grey and vulnerable space. One interviewee described how they don't want to refer to themselves as a "typical business" and so they like to use the term "social enterprise", but "it is only words, because there is no associated legal framework in China that would permit this kind of registration" (BCB1). Indeed, both of these buying clubs operate in a non-capitalist space where profits and commissions from food sales are re-invested to fund educational activities and events in their communities and in one case to purchase food for residents living on limited incomes. While

both buying clubs are grassroots projects started by groups of women interested in safe food, their motives have extended to include concerns with social and material wellbeing of their communities. These clubs organize activities to build food skills, and volunteers see food as a way to promote healthier relations between people. In both examples, the club reinvests any proceeds from food sales into social programs. The buying club in Beijing for example uses proceeds to fund a drop-in centre and educational workshops for women who are struggling to find employment or facing mental health challenges. In Chengdu also, the buying club's activities go beyond food procurement to include a type of collective kitchen teaching program they call 'Mum's Kitchen' and a free food program called "Farmers Friend Buffet".

Buying club volunteers have a keen interest in re-connecting consumers with farmers and in both cases organizers spoke about a commitment to organic and ecologically produced food. They echo a general distrust of the organic certification system in China and focus on ensuring quality of the food they source by visiting and interrogating suppliers directly. Both of these clubs organize trips to the farms they source from so their members can meet with the growers (BCC2, BCB1). The purpose of these visits is three-fold. First, they purchase from small, sometimes peasant farmers so they can help contribute to smallholder livelihoods (BCC2) Second, they want to provide their members with opportunities to connect with farmers and traditional farming practices (BCC1, BCC2). Third, these visits are a way of informally inspecting the production methods on the farms, which they refer to as 'conscious certification' (BCC1, BCC2).

3.3 AFNs in the Context of a Transitional Food System

This chapter has described how alternative food procurement networks are emerging into China's transitioning food system. CSAs, farmers' markets and buying clubs, initiated by a diversely motivated group of primarily young, educated, urbanites, are rapidly expanding and creating a space for themselves in the world's largest food economy. While China's food system remains traditional to a significant extent, modernization is underway. In this context, China's young food activists are also seeking to balance the traditional and the modern. They lament the loss of traditions and food skills that is accompanying modernization and are motivated to preserve these. They are concerned about the marginalization of peasants in rural

China, and seek to re-connect rural and urban spaces. Linked to NGOs and globally-aware, they are deeply concerned about environmental issues and see organic production and traditional Chinese agriculture as paths forward. At the same time, they are focused on pragmatics of distributing quality food to a burgeoning middle class preoccupied with food safety. The farm operators, motivated in part by its profit potential, see direct food marketing, where consumers and producers can meet directly and build trust, as both a helpful and opportunistic response.

Yet the motives of this small group of innovators and entrepreneurs are not always matched by the middle class consumers they seek to engage. Food buyers and CSA members share the concern for food safety with the AFN initiators, and some also share the desire to reconnect to traditions and to land. But these urban consumers are not particularly motivated by environmental concerns. Nor are they necessarily seeking relationships or re-connections with the peasantry.

With this description of China's mainstream food system, and the alternatives developing in response, I have described the context and set the stage for detailed analysis. The subsequent chapters explore how the pragmatics and ethics in these emerging AFNs are unfolding across four different dimensions. In each chapter, I draw on a different theoretical perspective to explore data from interviews, site visits, surveys and on-line posts in order to consider the 'alternativeness' of Chinese AFNs. Throughout, I try to take an approach that both celebrates and critiques these networks by considering the relevant themes from AFN scholarship while situating the analysis within the Chinese context. The next chapter first considers the economic relations of these AFNs and also serves to provide further background on China's agrarian reform and modernization processes of the reform period.

4.0 The Diverse Economies of China's AFNs

Much of the news we receive about China focuses on its urban and industrial environments. Indeed, in 2011, a milestone was reached when the proportion of citizens in China's cities reached 50% (Hsing, 2010). However, I begin my analysis of AFNs looking at agrarian change in rural China. This chapter, the first of four inter-related analyses that seek to understand China's emerging AFNs, looks at the economic relations in these networks. I argue that these networks sit in a contradictory place where capitalist and 'other-than-capitalist' market forms interact. In these AFNs, peasant forms of agriculture exist alongside processes we can understand as "de-peasantization" as well as "re-peasantization" (van der Ploeg, 2007). To elaborate on this perspective, I begin with an overview of China's agrarian reforms that have shaped AFNs. Here I focus on China's hukou or dual citizenship system, the decollectivization of agriculture, land rights reform and resulting rural-urban inequities. My intent is to provide context, necessarily abridged, in which to situate AFNs and introduce three different groups of people entangled in the emergence of AFNs in peri-urban China: urban residents, peasants and migrants. I describe how, while processes scholars consider to be depeasantization, or loss of self-provisioning economic forms, are underway in China, the unique approach to land ownership in China complicates and offers nuance to these processes. I then turn to AFNs in the global north and describe how scholars are using the concept of diverse and hybrid economies to explore AFNs. Here I expose a central tension in the scholarship that sees AFNs in a contradictory space between re-establishing historic agrarian relationships (what some refer to as re-peasantization) and becoming co-opted into capitalist space. In the last section of this chapter, I draw these two prior sections together and use the diverse economies framework (Gibson-Graham, 2006) to interrogate AFNs in China. Here I observe that while capitalist commodity relations are evident in these networks, and are perpetuated by consumers seeking better quality food for lower prices, we do not see the same path of depeasantization that is occurring in China's dominant food economy. AFNs in China are characterized by economic diversity, wherein capitalist relations involving waged labour, financial investment and surplus extraction co-exist in exchange relations with peasant economies characterized by self-labour, self-provisioning, a focus on livelihoods, and attempts to empower the peasantry and build rural-urban connections. China's commons approach to

land tenure features prominently in this analysis, as it has the effect of limiting scale and buffering against land consolidation. Rather than being 'niche' or 'fringe' markets, China's small scale CSA farms are using personal *guanxi* networks to grow quickly and are 'normalized' in a context where all farms are small.

4.1 Agrarian Change in China

The 'reform period' in China, as it is commonly referred to, began in 1978 when Chairman Mao's former lieutenant Deng Xiaoping took over party leadership and began the process of 'opening' to global trade and foreign investment and the shift to a market economy, which brought with it a period of unprecedented economic growth and improvements to livelihoods in both urban and rural areas. In rural China for example, the number of people living in poverty has declined from 85 million in 1990 to 36 million in 2009 (Dunford & Li, 2010). Yet at the same time, China has shifted from being considered one of the world's most egalitarian societies, to one with a widening rural-urban income gap. According toWorld Bank (2012) statistics, at .47, China's Gini coefficient of income inequalityis higher than that of the US at .41¹⁴. Indeed China's opening and turn toward capitalism has led to questions about the fate of rural China and its peasants.

Of course the story of China's agrarian reform unfolds differently, depending on who is telling it (Zhang, 2006). Based on a 'class-relations' paradigm, which dominated official discourse and policy 1950s to 1970s, exploitation of China's peasantry led to widespread rebellion. However, according to the 'market school' which has dominated discourse and policy since the early 1980s, Chinese peasants have always been driven by market incentives and profit. The reality is that while both rebellious and profit-seeking peasants have likely always existed, both movements have been idealized and the truth is that most were, and are still, ordinary farmers who are trying to survive under constantly changing, social, political, economic and ecological conditions (Zhang, 2006). No matter where one sits on the political spectrum, however, there is agreement that changes to China's system of residency registration and land entitlements were transformative.

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¹⁴ The Gini coefficient is a measure of inequality of income or wealth. A value of 0 expresses total equality and a value of 1 maximal inequality, (World Bank, 2012)

4.1.1 Hukou: Differential Citizenship

During the Mao era, a household registration system or hukou in China divided the population into rural and urban citizens by classifying every individual as agricultural or nonagricultural¹⁵ (Wang, 2010; Trichur, 2012). In this system, individuals were permitted to move 'downward' to a smaller city, or a rural location, or horizontally to a different city or village of similar 'level', but not 'upward' or to a larger city (Wang, 2010). These restrictions effectively closed off the possibility of peasants leaving the countryside to pursue opportunities in urban areas as a path out of rural poverty often chosen in agrarian transitions around the world. The dual citizenship system persists today, although it has been relaxed. Despite a constitution that guarantees universal protection of all citizens, scholars understand hukou as a system of differential citizenship, where basic rights such as migration, choice of employment, access to education and health benefits are violated (Wang, 2010; Wu, 2010). Wang (2010) details how urban citizens have access to social benefits such as housing, medical care and public education but in comparison, in lieu of these benefits, rural citizens have the benefit of land rights. Further, in addition to perpetuating inequalities in terms of social benefits, scholars argue that the hukou system is also a tool for social control and is used to maintain lists of individuals considered to be threats to domestic 'harmony' (Wang, 2010).

Today this dual citizenship system has been relaxed but not eliminated. Citizens are now permitted to move freely between and within rural and urban areas, but their citizenship and associated benefits and entitlements remain tied to their family's origin as either urban or rural, making the reform period changes largely cosmetic (Wang, 2010). So, while peasants are 'free' to move to urban areas to pursue employment or to establish businesses, they are not entitled to the same social benefits (e.g. education, medical care, basic income supports, etc.) as urban residents. Instead, their land rights in the countryside remain as their only form of social insurance. The *hukou* system in essence provides that an individual has access to land *or* social benefits - but never both.

¹⁵ The *hukou* system is indeed much more complex and has multiple sub-categories based on the 'level' of city for example, but for my purpose here this broad differentiation of agricultural and non-agricultural suffices. See Wang (2010) for a more thorough discussion of China's *hukou* system.

4.1.2 Land Reform: From Collective to Household Responsibility

While holding firm on the *hukou* system throughout the reform era, the Chinese state has been compelled by civil disobedience in rural areas to change its system of property entitlement or 'land rights'. Collectivization during the Mao era meant that all land and rural production was owned by the state. This changed when groups of peasants, starting in Anhui, began selling their surplus production to support their livelihoods. The state, observing the 'experiment' noted the increases in productivity when peasants had the incentive of a market, and the Mao-era 'collective responsibility system' was replaced with the 'household responsibility system (HRS)' (Whyte, 2010; Huang, 2011). ¹⁶ Initially the HRS awarded contracts to use land (but not private ownership) to rural households for 15 years (starting in 1984) and opened the door for farmers across the country to sell surplus production. ¹⁷ These contracts were later extended in 1993 for 30 years, and then extended through the Land Administration act in 1998 for another 30 years, suggesting that the state has no immediate intention to either re-collectivize or privatize land (Whyte, 2010, p. 11).

4.1.3 Peasant and Capitalist Relations

This change from collective to household production opened the road to agrarian capitalist relations and scholars have been exploring how these relations are evolving in the unique context of China's commons approach to land, and how China's historic peasant form of agriculture is being transformed (Huang, 2011; Zhang & Donaldson, 2010). Traditional marketing channels through specialty wholesale markets and wet markets, while still a significant part of the transitioning food system, are decreasing (Huang, 2011). In their place, there is a trend toward consolidated food chains, organized through contracts to farmers with a wide variety of enterprises, retailers and dragon head firms (Huang, 2011). This reveals a contradictory landscape where the household remains the unit of production (since land cannot

¹⁶ Scholars have observed that this astounding reversal of fundamental policy came about neither through a change in government nor through violence. Rather authorities responded to the "everyday politics" of resistance (Kervliet, 2009, p. 231) where farmers pursued their entitlements by drawing on existing state rhetoric and rules. This type of resistance is a theme I return to in Chapter 7.

¹⁷ In general this was the case, although there were exceptions. For example, in some cases villages refused to divide the land and continued to farm it collectively, and state-operated farms continue to exist for example. See Whyte (2010) and Wright (2013).

be consolidated) and, through complex systems of contracting, peasants are moving to commoditized food relations and away from self-provisioning (Huang, 2011).

This shift from collective to individual responsibility, propelled by the state's promotion of industrialized agriculture resulted in huge agricultural productivity gains in the early reform period (Carter, Zhong & Zhu, 2012), which came at the price of widespread ecological degradation (as will be highlighted in the next chapter). This increase in production, coupled with off-farm incomes that peasants were now free to pursue, lifted peasant incomes by over 30% between 1984 and 1998 and the HRS has been described as a key mechanism in bringing millions of poor smallholders out of poverty (Zhang & Donaldson, 2008). Under the HRS, urban land remains owned by the state but rural land is owned by village collectives. These collectives in turn award land use rights, along with the right to transfer or lease the land, but not sell the land, to peasant households based on the number of family members. However, the central government is able to use a variety of tax levers and a system of evaluating the local cadres to influence the local governments' decisions on land entitlement (Zhang & Donaldson, 2008). Legally, land usage rights apply equally to men and women. However when women marry, their usage rights become linked to the husband's family. In the event of a divorce, women typically lose land access in the husband's village, and often are not able to regain their natal rights in their family village (Jacka, 2012).

4.1.4 Complicating 'Accumulation by Dispossession'

'Accumulation by dispossession' refers to the process by which wealth is concentrated in the hands of a few by dispossessing people of their land and other assets under capitalist systems (Harvey, 2004). There is conflicting evidence about whether this dispossession is underway in China (Zhang & Donaldson, 2008). Arguing that China's land entitlement system contributes to peasant dispossession, Le Mons Walker (2008) notes that industrialization and urbanization occurring in the last 30 years, despite state policy awarding land use rights for 30 years, have resulted in widespread conversion by the state of rural land for non-agricultural use, particularly in suburbs of rapidly growing cities and the coastal areas. In what could be considered domestic land grabbing, or dispossession by the state, farmers are only compensated based on the value of their most recent agricultural output when the state

expropriates their land. She describes the scale of this expropriation and notes that between 2002 and 2005 rural collective protests and insurgency became an everyday part of peasant politics and estimates that 60 million peasants have had their land seized between 1996 and 2008 (Le Mons Walker, 2008). Recently updated figures, suggest that if the state appropriation processes continue, there could be 140 million peasants landless by 2030 (Sargeson, 2013).

On the other hand, Zhang & Donaldson (2008) argue that these protests against land seizures demonstrate that to Chinese peasants, collective land ownership is an important bargaining chip for use in negotiating with expanding agri-business firms. They illustrate how peasant farmers in China have many choices with regard to how they structure the use of their land rights, ranging from what could be considered 'semi-proletarian' to 'full proletarian' status (Zhang & Donaldson, 2008). Farmers can retain their land use rights and choose to farm their own land with family based labour or hired labour. Or a farmer can lease land use rights to a company or cooperative intending to farm the land in exchange for a waged position on the same or other land. Alternatively, the farmer could 'sub-lease' their land rights to someone else (such as one of the urban CSA farmers interviewed in this research) and then seek employment outside of agriculture. Or the household could give up their land rights and establish residency elsewhere and make their way in a waged economy. These options for peasants persist because land is not privatized. The existence of these choices for peasants in China leads scholars to suggest that the classic form of 'accumulation by dispossession' is not occurring (Trichur, 2012).

4.1.5 China's 'Floating' Population and Urban-Rural Inequities

Relaxing citizenship restrictions combined with the freedom to pursue income from off-farm sources has resulted in vast rural to urban migration in China. However, continuing to link social benefits to *hukou* status has meant that rural residents pursuing urban livelihoods have become a marginalized class. They have abandoned the possibility of earning a livelihood from land, to which they have rights, but have no social safety net in the urban area where they have chosen to live. The size of this 'floating population' is tough to pin down of course, since it is a state of constant flux, but most recent estimates suggest between 140 - 250 million people are living in a grey and vulnerable area 'in between' rural and urban status, occupying

30% or more of the population in an average large city at any point in time and leaving the countryside populated primarily by grandparents and children (Whyte, 2010). As might be anticipated, early in the reform era this group of migrants took the jobs that most urban residents eschewed, but as urban residents were laid off from formerly protected jobs in the 1980s and 1990s, migrants were increasingly seen as a threat. As a result, most large cities further contributed to migrant marginalization by passing regulations which prohibited peasants coming to the city from various occupations (Whyte, 2010). This marginalization fits within a set of persistent social attitudes (discussed further in Chapter 6) in which urban residents are considered to be of higher quality, or *suzhi*, than rural residents (Anagnost, 2004). This *suzhi* narrative makes the urban look more attractive to rural residents and further perpetuates migration. In this privileging the urban, villages have been emptied of young people and men. It has been estimated that approximately 58 million children, 47 million wives, and 45 million elderly have been left behind in rural communities by migrating family members (Ye, Wang, Wu, He & Liu, 2013).

However, the future of China's 'floating population' is far from determined. Indeed rural areas also benefit from migration through remittances that are sent back to families and skill acquisition, such as construction trades, that is carried home when migrants return to their farms (Van der Ploeg et al., 2014). Since rural to urban migrants in China still possess land rights and often families in the countryside, this is not a simple "brain drain" (Whyte, 2010, p. 363). Rather there is also an influx of skills and resources to rural economies. Unlike landless migrants that characterize slums in many developing countries, in China these migrants have land rights. Displacement is not dispossession and there is a difference between permanent migrants to urban areas and temporary migrants. The majority of China's migrants retain land use rights in their home villages. So while statistics estimate the 'floating population', only time will tell where these families choose to take up permanent residence. Based on research in Heibei Province, van der Ploeg et al (2014) observe that migrant labourers seem to be returning to their home villages at younger ages, noting that 5% of men under 30 years old and 30% of men between 30 and 40 years have recently returned to farming as their livelihood.

4.1.6 Addressing Inequities: 'New Socialist Countryside' Policies

While Deng Xiaoping's call to "let some people and some regions get rich first" started the reform period three decades ago, we may now be seeing the latter part of that same slogan "to eventually achieve common prosperity" being put into action (Yeh, Xu & Liu, 2011). Responding to growing rural-urban inequities and under the slogans of building a 'Harmonious Society' and a 'New Socialist Countryside', China's eleventh Five-Year Plan, announced in 2006, launched policies to place rural initiatives more prominently in the modernization agenda. Under this initiative, rural policies focused on building new infrastructure and social services and included phasing out agricultural land tax, supports for rural schooling, introduction cooperative medical insurance systems in rural areas, a minimum income subsidy program¹⁸ and some modest old-age payments to rural parents without children (Wang, 2007; Wang, 2010). The state also eased regulations to give migrants better access to some benefits, and opened up the possibilities, with some restrictions, to change *hukou* status (Wang, 2010). These progressive trends seem to be continuing, and analysts suggest China's most recent Five-Year Plan, endorsed in 2011, signals the state may be centring social harmony over growth (KPMG, 2011). Introducing the concept of 'inclusive growth', Wen Jiabao noted in his February 2011 speech, "We should not only make the cake of social wealth as big as possible, but also distribute the cake in a fair way and let everyone enjoy the fruits of reform and opening up" (KPMG, 2011, p. 2). Features of addressing wealth disparity include targets to increase social housing, high school completion and minimum wage, in addition to a host of environmental programs. Yet leftist intellectuals in China are not hopeful, and note that these changes are premised on consumption and market-driven growth and further urbanization (Yeh et al., 2011) and argue that the state's New Socialist Countryside recalls the propaganda of the Mao era (Perry, 2008).

4.1.7 Commons Land and Capital Penetration as a Context for AFNs

This description of agrarian change in China's reform period has argued that China's commons approach to land ownership presents fundamentally different context for the emergence of AFNs compared to the global north. Urban land is owned by the state and in

¹⁸This program to a degree mirrored in rural areas the '*diabao*' or minimum income program in the urban areas. For a thorough discussion see Wang (2007).

rural areas land is owned by village collectives. Recalling the story of the Mandate of Heaven presented at the outset of this dissertation, scholars argue that such unfolding of land reform in China has not been a straightforward 'accumulation by dispossession' characteristic throughout most of the global south. The situation is more nuanced, with some arguing that the HRS system, as a response to popular demands from peasants, is an example of retaining legitimacy to govern through a strong commitment to ensuring livelihoods (Trichur, 2012). The Chinese context is further complicated by the separation of land entitlement (HRS) from citizenship status (hukou). Despite a commons approach to land, however, scholars have described how capital is penetrating the countryside and forms of agrarian capitalism and de-peasantization are underway. The result is a system of three social classes emerging in China's reform period. Peasants or village residents enjoy land use rights but not the same social benefits as urban residents and have a range of possibilities for 'feeding into' a still modernizing food system. This change from collective to household production has opened the road to agrarian capitalist relations and a de-peasantization process is gradually unfolding. Meanwhile, urban residents who are entitled to social benefits but have no entitlement to land are facing increasing distancing from their food and rising food prices that accompany modernizing system. Finally, a vast group of migrants, who have temporarily or permanently relinquished land use rights and are seeking urban employment, are marginalized in cities without any of the benefits of urban citizenship. As I illustrate below, China's AFNs weave together these different groups into diverse economic relations. Before moving to those findings, I introduce how the concept of diverse and hybrid economic relations, and re-peasantization have been drawn into AFN scholarship in the global north.

4.2 AFNs in the Global North: Resistance or Futility?

The above section looked at the relatively new penetration of capital into rural China and its effects on the self-provisioning subsistence farming of peasants. In the more neoliberal global north, the ability of AFNs to survive this penetration has been debated long and hard. Recently, rather than trying to argue that AFNs offer 'alternatives' to capitalist food relations, scholars have been theorizing about the existence of hybrid and diverse economic systems as better ways of explaining AFNs. This section briefly summarizes the position of AFNs as 'in and against' the market, where the negative impacts of capitalist markets on people and nature

are challenged through markets for high value products (Raynolds, 2000). These tactics have been a focus of debate, with scholars noting that even the smallest initiatives, like CSAs, are increasingly demonstrating capitalist relations with waged labour and commoditised food relations. Next I move beyond this critique to describe how another group of scholars understands AFNs as hybrid economic approaches that embrace both capitalist and noncapitalist relations to demonstrate 'another world is possible'. My purpose in this section is to introduce how the 'diverse economies' approach has been pursued by AFN scholars before using it to interrogate Chinese AFNs.

4.2.1 Resistance is Futile

Scholars have drawn on diverse examples to argue that as long as AFNs remain based in market rules they will not escape capitalist relations (Guthman, 2008). Even among what is considered the 'most alternative of the alternatives' with its risk-sharing approach and non-commodified food relations, scholars argue the CSA is increasingly becoming influenced by capitalist relations and losing its 'alternativeness'. From this perspective, CSAs are diverting from their original model and members are increasingly referred to as 'customers' or 'shoppers', who make choices from available options (Brown & Miller, 2008; DeLind, 2003; DeLind & Bingen, 2008). The case of the Riverford CSA in England is frequently referenced in this regard, as a CSA that over time has followed a path of commodifying food relations to the point where it now takes the form of a consolidated firm that operates in competition with smaller growers (Clarke, Bloke, Barnett & Malpass, 2008). Instead of trying to maintain such alternatives as market-based activities, this critique advocates a focus on the redevelopment of a strong state that is willing to develop and enforce not only food-related policies, but also policies that address historical marginalization that plagues AFNs¹⁹. Julie Guthman is best known of this group of scholars for her perspective on 'neoliberal subjectivities' that lock us into capitalist relations. She explains that: "material neoliberalizations are inextricably bound with the production of neoliberal 'mentalities of rule' – specifically attempts to enforce market logics, to create conditions in which competition can flourish, to shift caring responsibilities from the public sphere (welfare) to personal spaces (self-help) and to depoliticize (or render futile) various social struggles over resources and rights" (Guthman 2008, p. 1243).

¹⁹ This 'social justice critique' of AFNs is picked up in Chapter 6.

Increasingly however, these arguments are being met by the 'other worlds are possible' perspective.

4.2.2 Other Worlds are Possible

Rather than dismissing market-based alternatives as inevitably co-opted by mainstream pressures, some scholars are drawing on post-capitalist theories to help us think through different possibilities (Fuller, Jonas & Lee, 2010; Harcourt, 2013; Leyshon & Lee, 2003; McKinnon, 2010). These views suggest that conventional, mainstream food systems (and indeed capitalism in general) are not totalizing, and our assumptions about 'the market' need to be questioned (Dixon, 2011; Tregear, 2011). In challenging the view of a hegemonic capitalist market that is destined to co-opt any alternative, these scholars see AFNs as "openings and possibilities" for "other-than-capitalist" ethics (Gibson-Graham, 2006, p. xxvi). This growing discourse sees AFNs as diverse forms of economic relations that may include, but not be limited by, capitalist forms (Cameron, 2010; Cameron & Gordon, 2010). These scholars argue that bifurcated or 'all or none' thinking, where AFNs are seen as in opposition to, and thus often co-opted by, capitalist relations can overlook economic entanglements, diversity and hybridity (Holloway et al., 2007; Jarosz, 2008). AFNs may well demonstrate capitalist market relations, but these relations are not necessarily dominant or exclusive. There is growing recognition in AFN scholarship that small-scale 'niche' firms and farms seldom operate independently from the wider food system in which they are situated (Andree et al., 2010; Fickey, 2011; Galt, 2013; Maye & Ilbery, 2006; Sonnino & Marsden, 2006). Rather, researchers have described the ways in which these AFNs frequently embrace both alternative and mainstream sales or input channels simultaneously (Ilbery & Maye, 2005; Ilbery, Courtney, Kirwan & Maye, 2010).

4.2.3 Diverse Economies

Following from the above examples, some AFN scholars have turned to Gibson-Graham's diverse economies framework as a way of understanding how AFNs create and use hybrid economic strategies (Dixon, 2011; Fuller et al., 2010; Harris, 2009; Jones et al., 2010; Little et al., 2010; Wilson, 2013). For Gibson-Graham (2008), alterity is seen as a matter of degree. This view understands AFNs to be in a state of incomplete transition or always in

development. Instead of reductive questions that try to evaluate alternatives against a dominant economic type (like capitalist), they would have us look for how alternative economic relations are being built and strengthened. A range of AFN types have been unpacked using the diverse economies approach. Little et al. (2010) draw on this perspective to analyze buying clubs and conclude they can be seen as a "microcosm of the 'diverse economy' ...encompassing both corporate and not-for-profit, waged labour and payment-in-kind, and personal and communitarian gain" (p. 1802). Harris (2009) has used the diverse economies framework to offer an alternative reading of the '100 mile diet' as a case study, and suggests that the "tendency to read neoliberal logics and subjectivities in AFN initiatives might inadvertently be closing down possibilities for constructive socio-environmental change in and through food networks" (p. 55). The possibilities Harris refers to have been explored by Galt's (2013) extensive CSA research, in which he documents 'other-than-capitalist' relations such as farmers focusing on livelihood goals versus higher profits, or self investment versus distant shareholders. He clarifies that of course CSA shares have an exchange value which can be considered as a commoditized relation, but this alone should not lead us to characterise them as 'capitalist'. He explains that all *commercial* activities (selling food) are not necessarily capitalist activities, and research on mainstreaming of alternatives has at times confounded this difference. Indeed as Fickey (2011) so aptly notes, surely the "focus has to be on helping people make a living" (p. 237).

4.2.4 Re-Peasantization

Scholars have been suggesting these diverse economic forms might be considered as ruptures in trends to modernize farming and the re-emergence of the peasantry or 're-peasantization' in both developed and developing countries (van der Ploeg, 2008; van der Ploeg, Ye & Schneider, 2010). In this way, AFNs are seen as new peasant networks that are potential paths to finding local food systems that are economically, ecologically and socially sustainable. Van der Ploeg (2008, 2010) has been at the forefront of describing processes whereby land is considered as ecological capital, and commodity relations are part of a set of balances between human actors and living nature. He notes that, whereas in the past peasants were "obliged" (2010, p. 5) to use their land ecologically because there was no alternative, today's new peasants have other alternatives available to them, with some of them choosing to

're-ground' the farm on ecological principles. His analysis points to smaller scaled farms that resist scale enlargement, specialization, genetically modified technologies, state regulatory schemes and externally sourced inputs, and that are generating in many cases higher incomes than entrepreneurial and capitalist approaches of similar scale (Oostindie, van der Ploeg & Renting, 2002). Using the European IMPACT²⁰ research program as an example, Van der Ploeg et al. (2010) note that "60% of professional farmers are actively engaged in costreduction through greater self-provisioning, which contributed at least 5.7 billion Euros per year to the agrarian incomes realized in these countries" (p. 7). The process of repeasantization centres on the "sometimes contradictory re-adjustment of the balance between commodity and non-commodity relations, in which specific forms of de-commoditisation play a key role" (2010, p. 3). This balance takes the form of 'self-provisioning' where inputs and material resources are decommodified and either produced on the farm itself, or through community based co-operation and exchange processes with similar farms. Re-peasantization is about building multifuncationality into farms. In AFNs, we see this expressed in many ways as farmers add both non-agricultural activities (e.g. agro-tourism, handicrafts) and/or add value to farm products (e.g. on-farm processing, direct-selling) to their operations. These activities allow new peasants to continue to reproduce their existence in resilient ways, resist capitalism and interact with the market as an opportunity not an imperative.

4.2.5 Reading for Difference not Dominance

This discussion highlights how, following emerging thinking on post-capitalist diverse economies and 'new peasantries', scholars are challenging the idea that AFNs exist in a bifurcated alternative-dominant set of relations. Empirical research (Cameron, 2010; Dixon, 2011; Harris, 2009; Jones et al., 2010; Little et al., 2010; Wilson, 2013) reveals that AFNs demonstrate hybrid relations, where capitalist and non-capitalist processes are entangled, and where markets present opportunities to reproduce the peasantry rather than eliminate it. In all these examples scholars argue that the economics of these AFNs or new peasantries cannot be 'simply' reduced to capitalist relations that rely on commoditized production, waged labour

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²⁰ The IMPACT project covered Ireland, the UK, the Netherlands, France, Spain and Italy. For further details see Oostindie et al. (2002).

and extracting surplus. Instead, there is a diversity of relations that include self-provisioning, barter, and investing surplus in ecological production. Understanding AFN economies as diverse, this perspective complicates Marxist theories of capitalist development and challenges the view of capitalism as a totalising concept that subjugates all other economic forms (Gibson-Graham, 1996; Gibson-Graham, 2006). Further, these scholars argue that these diverse and other-than-capitalist relations are not insignificant. Indeed, they are widely prevalent. However, as Harris (2009) illustrates, we typically overlook them. Seeing the 'politics of the possible' is a central problematic in AFN research. A growing scholarship on diverse economies offers a way of revealing these possibilities by "reading for difference rather than dominance" (Gibson-Graham, 2006, p. 54). In this Chapter's final section, the framework for doing this is explained and then used to look at economic relations in China's AFNs.

4.3 Diverse Economies of China's AFNs

As illustrated above, AFNs in the global north are demonstrating diverse economic relations, wherein people are able to earn a living without being purely subject to capitalist relations. Following this reasoning, I turn to China's emerging AFNs and ask, to what extent are these AFNs using logic other than capitalism to perform the economy otherwise? (Gibson-Graham, 2001). Using the diverse economies framework, I consider the ways in which land tenure (e.g. private, state managed, open access or commons), enterprise type (e.g. capitalist, alternative capitalist or non-capitalist), market transactions (e.g. commodified, fair trade, barter, self provisioning), labour relations (e.g. waged, barter, self-employed, unpaid) and financing are demonstrated in these networks.

The diverse economies framework is grounded in the view that capitalism is not all-encompassing (Gibson-Graham, 2006). By unpacking the economic relations in detail, the diverse economies framework helps to dissolve the meta-narrative of capitalism that can mask heterogeneous economic relations. Gibson-Graham (2001) de-essentializes the idea of capitalism by likening the economy to an iceberg (see Figure 5). The part of the iceberg in view to us, above the water, is what we typically consider as 'the economy'. However, there are diverse other economic activities which we do not often immediately consider when we

research economic relations. The activities and relations below the waterline are generally hidden from our view, but yet the capitalist economy, depicted as the tip of the iceberg, depends on these to function. For Gibson-Graham, the other-than-capitalist relations below the waterline are not an 'alternative' economy situated in opposition to the capitalist one. Rather, the iceberg reveals there are many types of economic relations and they can be packaged together to create diverse and hybrid forms. This perspective argues that criticisms of AFNs that see them becoming 'mainstreamed' and 'co-opted', draw on a limited view of the economy as the relations above the waterline. A broader view is necessary if we want to unpack economic relations in AFNs.



Figure 5: The Economy as an Iceberg Source: Gibson-Graham, 2001

Another, perhaps more academic way of seeing these diverse economic relations is through the diverse economies framework presented in Figure 6 (Gibson-Graham, 2005). This framework offers an approach to thinking about economies broadly, as exchanges of goods and

services to meet needs and demands. It shows the dominant capitalist relations (or the tip of the iceberg) along the top row. This row includes goods and services transacted through the market by capitalist firms who use private property, investments and waged labour to produce and accumulate surplus. However, the figure also shows how the relations we typically consider as 'the economy' are joined with all other-than-capitalist forms that sustain wellbeing, or the rest of the iceberg. The figure is organized by five characteristics or aspects of economic relations: remuneration of labour, transactions of goods and services, property relations, enterprise type (how surplus is appropriated and distributed) and finance. Using these dimensions, the framework can be a tool for revealing the contribution of economic relations that remain hidden when we only look with 'capitalocentric' eyes. In effect, capitalist activity is "knocked off its perch" (Gibson-Graham, 2005, p. 13) when we consider this diversity.

LABOR	TRANSACTIONS	PROPERTY	ENTERPRISE	FINANCE
Wage	Market	Private	Capitalist	Mainstream Markets
ALTERNATIVE PAID Self-employed Reciprocal labor In-kind Work for welfare	ALTERNATIVE MARKET Fair trade Alternative currencies Underground market Barter	ALTERNATIVE PRIVATE State-managed assets Customary (clan) land Community land trusts Indigenous knowledge (Intellectual Property)	ALTERNATIVE CAPITALIST State owned Environmentally responsible Socially responsible Non-profit	ALTERNATIVE MARKET Cooperative Banks Credit unions Community-based financial institutions Micro-finance
UNPAID Housework Volunteer Self-provisioning Slave labor	NON-MARKET Household sharing Gift giving Hunting, fishing, gathering Theft, piracy, poaching	OPEN ACCESS Atmosphere International Waters Open source IP Outer Space	NON-CAPITALIST Worker cooperatives Sole proprietorships Community enterprise Feudal Slave	NON-MARKET Sweat equity Family lending Donations Interest-free loans

Figure 6: Diverse Economies Framework Source: Gibson-Graham, 2001, 2005, 2006

4.3.1 Evidence of Entrepreneurial and Consumerist Ethics

The AFNs I explored in China can be characterized as pragmatic and instrumental, driven by entrepreneurial ethics and a middle class pursuit of food quality, and supported by peasant labour. They have been established primarily by young urban residents who recognize the opportunities in an emerging market economy. These operators display a strong entrepreneurial spirit, encouraged in China's new market economy, with its emphasis on urbanization and consumerism. In a comment typical of the CSAs I interviewed, one operator noted he chose the CSA approach because it is, "an easier way to market and with a better return than selling to a supermarket' (FCSAIB1). This frankness appears in contrast to the original conception of CSAs in the global north, where they were established as a way of resisting capitalist relations by de-commoditizing food and de-linking the cost of food from market-based commodity pricing (Janssen, 2010). As in the global north, China's CSAs can be understood as responding to consumer demands for convenience and choice. They are evolving in instrumental fashion as a response to the emergence of a new middle class and an increased demand for high quality and safe food (Shi et al., 2011). To illustrate, on most of the CSAs I visited, there was limited 'risk sharing' between consumers and operators of CSAs. Indeed, only two CSAs asked members to share risk with the operators through up-front payment, and both of these had strong links with NGOs and academic communities, and would be considered 'not-for-profit' operations. All the other CSAs, established more pragmatic payment schemes, typically selling goods on a week to week basis, with no requirement for pre-purchase. Other characteristics further suggest that Chinese CSAs demonstrate capitalist subjectivities of price and convenience. For example, convenient drop locations or home deliveries are the norm, so members are not required to make long trips to the farms. In summary, the initial picture that comes into focus is one of consumerism, choice and convenience, or what some global north scholars have described as neoliberal subjectivities and mainstreaming of alternatives (Allen & Guthman, 2006; Guthman, 2008).

The labour relations on these farms offer further evidence for this 'mainstreaming' perspective that sees China's CSAs operating under neoliberal subjectivities. CSAs are employing (in contrast with global north CSAs) large numbers of peasant workers. Indeed, as a CSA operator, it was incredulous to see the numbers of workers on Chinese CSAs the same

size as my own farm. On average, CSA farms I studied employed 2 workers per acre, in addition to non-waged family members (see Table 4, p. 56). However, few CSA operators involve members, labourers or other volunteers in the organization and planning of the farm. There is a clear separation of management and labour functions with no ethos of worker participation in farm decision-making and governance. China's CSA operators shape the conditions of employment of peasant workers, believing the waged peasants are ignorant of organic farming techniques (discussed further in Chapter 5). This contrasts to CSAs in the global north where alternatively waged arrangements like self-provisioning, work shares and internships are common, and these individuals are, at least to some extent, involved in farm decisions (Cameron, 2010; Cameron & Gordon, 2010). In China, the way the term 'work share' has been adopted is revealing. In the global north, a work share refers to a member who contributes to the overall production on the farm as part of the farm's labour pool, and receives an allocated share of food in exchange (Cameron, 2010). In China, the use of the term reflects a more individualist approach, where consumers rent land on the farm, and (to various degrees) participate in, and oversee, the production of vegetables for themselves (Chen, 2013a). (These work shares or 'weekend farmers' on China's CSAs are discussed further in Chapter 6.)

In conclusion, while the operators of many of the CSA farms I visited referred to themselves as 'new peasants', a first look at their capitalist style market transactions and labour relations, suggest they are better considered as examples of entrepreneurialism rather than peasant ethics. However, looking beneath the surface to the parts of the iceberg below the waterline using Gibson-Graham's framework reveals a different picture. Concern with economic viability does not preclude or necessarily eclipse other motives and China's AFNs are far from homogenous. The strength of using the diverse economies framework as a lens is that it prompts analyses that consider multiple dimensions of economic activity.

4.3.2 Stories of Economic Diversity

The following series of narratives and the summary in Figure 7, reveal the economic diversity in these AFNs, made possible by China's unique *hukou* approach to citizenship and common pool land resources. The stories illustrate a persistence of the peasantry, a process of

de-peasantization that mirrors relations in the mainstream agrarian system, as well as processes of re-peasantization all occurring simultaneously in these economically diverse AFNs.

Farm	Enterprise Type	Market Transactions	Labour Relations	Land Relations	Financing
Narratives	Type	Transactions	Relations	Relations	
Peasant Farm	Non- capitalist, any 'surplus' is reinvested into the farm	Self- provisioning, and sell the extra	Self and family labour	Commons - holds right to the land	Self-financed
Not-for-Profit Farm	Non-capitalist – structured as not for profit	Shared risk	Waged, barter, interns	Leased land	From shares, with NGO/academic support
Entrepreneurial Farm	Alternative capitalist – surplus is reinvested	Commoditised, no shared risk	Waged labour	Leased land and labour as a "package deal"	Self-financed
Capitalist Farm	Capitalist – surplus is extracted as profit for shareholders	Commoditised, no shared risk	Waged labour and contract farming	Leased land	Shareholders and investors
Re- Peasantization Farm	Alternative Capitalist – surplus is shared by parties	Shared Risk	Mix of family and self-labour, interns and waged labour	Peasant farmer holds right to the land	From shares sold

Figure 7: Diverse Economic Relations in China's AFNs

Source: this author

Peasant CSA Farm (FCSAB7): This is a CSA farm on 2 acres of land located outside of Beijing. The operator is a young woman whose family has always farmed this land, for which she holds land use rights. She works in the field herself and occasionally other family members assist her. The farm is her only source of income. Her family consumes what she grows and she sells the excess to 50 CSA members as well as to the Beijing Organic Farmers market. She grows a variety of vegetables, some fruits, and raises a few laying hens

for eggs. I met her at the Beijing Farmers market, at a group meeting which several farmers' market producers attended, as well as at the 4th annual CSA Conference in Beijing in 2012 where I interviewed her. She told me that she knows she could seek other work in Beijing as her farm is very close to the city, but that she believes there is honour in growing food. She became concerned about high chemical use on her farm in the 1980s and worried about her health, and made the decision to return to more traditional approaches and stop using synthetic fertilizers and pesticides. She is frustrated by consumers who are motivated only by price. She said she is looking for "high quality" consumers and that it has been difficult for her to establish regular members. She only accepts annual shareholders so people can understand the limitations of the seasons. She is grateful to the farmers' market because they sought her out and have helped her to bring some of her vegetables to the market for sale. At a meeting organized by the Beijing farmers' market coordinator, she showed her frustration with consumers who are focused on price and engaged in debate with people who were lamenting the rising cost of vegetables.

Not-for-profit Farm (FCSAB4): This farm is one of the larger CSAs I visited, and perhaps the best known CSA in China. Located in a Beijing suburb, the farm was started in 2008 by a Chinese doctoral student in agricultural economics, who had been associated with the Institute for Agriculture and Trade Policy (IATP) and spent six months an a CSA farm in the US. She brought the idea of starting a CSA back to China and with university support, began this CSA as a not-for-profit model farm. Supported by a university and municipality, the farm operates as a hybrid between public and private realms. The university arranged for land access and provides some funding for the management and operation of the farm. This academic support gives the CSA credibility and important connections or 'guanxi'. The farm is strongly committed to member involvement and their CSA shares operate on a "shared risk" basis. They offer internships to university students as a form of barter in addition to having waged labourers. They have some migrant labourers from rural areas, as well as volunteers and try to involve workers in decision making. Their university support allows them to take on a strong educational role with other farms in the network and they host events and actively share resources via the internet and have a strong media presence. Their network relations extend to the local government, which originally provided some financial support as well as helping them to access over 50 acres of land. They are frequently highlighted in the local and national

media and their networks have helped them grow very fast. They started with 17 families in 2008, and today offer 200 shares, and have over 800 families in their network. In 2011 they were awarded the 'Constructing a New Socialist Countryside Innovation Award' for their work in linking urban and rural communities.

Just prior to my interviews with them in spring 2012, the person who initiated the farm left to start a new type of CSA (FCSAB6 described below). She felt that the first CSA had taken on a "corporate structure" and was differing form the original egalitarian working structure she envisioned. She explained to me that this first CSA had moved from a "producercentred to consumer-centred structure" and was neglecting the empowerment of farmers.

New Peasants (FCSAB5): This farm was initiated by a young urban Buddhist couple motivated by both a concern for the environment as well as the "market opportunity". Referring to themselves as "new peasants" they favour a small scale of production as well as a desire to re-learn traditional practices. They negotiated with the local village for both land and labour in a "package deal". They are uncertain whether they should call themselves a "CSA". While they have an established list of members who purchase food weekly, they do not expect these buyers to share production risk. Peasants working on the farm draw a wage. The operators draw wages, and surplus is reinvested in the farm. The operators coordinate the work of the farm, but the manual labour is performed primarily by peasant workers who live adjacent to the farm. The farm is "organic in transition". They do not use chemical fertilizers or GMO seeds. Nor do they control pests by natural means, such as introducing beneficial insects. On their website, in reference to their agronomic practices, they describe themselves as a "truly harmonious farm". They have a greenhouse for extending the season. They produce a wide range of vegetables as well as strawberries and also mushrooms. They have a small store for their own products as well as natural and personal care products from other small-scale producers. They make extensive use of the internet for promotion, sending weekly updates to their members with details of what is available. Members can select items from a list and pay 'a la carte', or they can choose a "random selection" for weekly delivery. Either the farmers strongly encourage their buyers to come see the farm, or they set aside particular days for tours.

Capitalist Farm (FB1): This farm is best described as a dairy that contracts with "several farmers" and processes organic milk for sale through an on-line system. They sell at the Beijing farmers market, which is where I met the operator initially, and also offer weekly deliveries of fresh organic milk and yogurt. I spoke with the owner a second time at the 4^{th} annual CSA Conference in Beijing in 2012. Beginning with funds from private investors, the company's production has expanded beyond the household level. They milk 200 cows from their own organic farm and also have contract relations with several smaller farms for some of their milk. He considered their production capacity to be limited, but expanding. At present he noted they can only supply dairy products to 4,000 - 5,000 households. They are the only certified organic dairy in Beijing. They sell primarily through "high-end" retailers and through websites. They had just begun selling at the Beijing organic farmers' market and were pleased with the response. There are a number of stories about them in the Chinese press. One *China Daily* report (July 3, 2013) pegs their business at US \$226 million and a retail network spanning 260 cities.

Re-Peasantization (FCSAB6): This is one of the newer farms in the AFNs I studied. It operates with the goal of re-building traditional peasant agriculture and re-establishing trust between urban consumers and peasant farmers in China's peri-urban areas. The first season on this farm coincided with my first visit in spring 2012. The urban operators began the project by approaching a peasant farmer outside of Beijing with the idea of starting an ecological CSA as a way of establishing links between urban consumers and peasant farmers. Instead of renting land from the village as other urban-operated CSAs do, these operators live in the village with the peasant farmer and take on the role of "brokers", selling shares and coordinating the CSA. Members share risk by paying up front. Instead of a waged labour arrangement, the urban operators share proceeds with the peasant farmer, and guarantee that as a minimum, they will match the amount of money he was making previously in conventional vegetable production. In the first 6 months, these urban operators sold 300 CSA shares by using their "networks" (guanxi), demonstrating a new viable model to the peasants and the village, and making it possible to expand operations to a second site. Their long term goal is for the village peasants to take the model over once trust has been re-established with members. The urban operators plan to then replicate the model in other villages and in this way they are trying to create spaces of empowerment for peasant farmers with the goal that eventually the peasant farmers will assume operation of the CSA. The project makes extensive use of the internet, and has recently launched websites in both English and Chinese. They describe the project as a "public-interested, service-oriented social enterprise started by a group of young people". They sell CSA shares, as well as sales to local restaurants, schools, and the farmers' market in Beijing. They use no pesticides, no fertilizers and no GMOs. Their statement of principles says that they are: choosing "sustainable farming in order to protect water, soil, air and biodiversity for the next generation", adopting a "fair trade model to support local farmers and the local economy", and building a "community based on the trust and sharing relationship between citizens and farmers".

The above descriptions illustrate the diversity of economic relations on China's CSA farms. This is not a staged approach; there is no implied trajectory across these farm types. Despite their pragmatic and instrumental nature described at the beginning of this discussion, several characteristics evident in these stories distinguish Chinese AFNs from mainstream economic relations and I suggest we can best understand China's AFNs as hybrids of capitalist, alternative capitalist and non-capitalist forms (Gibson-Graham 2006). This diversity is revealed in three ways: first through the ways in which land and labour are treated as common pool resources, second through the focus on livelihood, self-financing and decentring of surplus, and third through a prevalent discourse on the social economy.

4.3.2.1 Labour-Land Nexus

Since land remains a common pool resource in China and the HRS places decisions about rural land use squarely with rural villages, urban entrepreneurs seeking to start CSAs are faced with negotiating land tenure agreements with peasants resulting in a more complicated set of power relations than seen in waged labour relations in the global north. In China, landless entrepreneurs need to seek permission to use land from peasants. In the context of China's rapid urbanization, where peasants with land rights in peri-urban areas are often waiting for lucrative compensation due to them when the state expropriates land for development, these leases are getting tougher and tougher to negotiate (FCSAB3). Thus land is a bargaining chip for peasants in China, in contrast to workers in capitalist class relations who

do not have direct control over the means of their own production and need to sell labour for wages. Several urban CSA operators explained how, on the outskirts of a large and growing city like Beijing, land leases are becoming more expensive and shorter in duration (FCSAB3, FCSAB1). However, while lamenting higher rental prices, accessing land did not seem to be a barrier for any of the urban entrepreneurs I spoke with. Indeed, several of them shared plans for expanding their land rental in upcoming years (FCSAB5, FCSAB3). It is also interesting that, unlike in the global north where land and labour are usually separated (in that both or either are available for purchase), land and labour in China can be a "package deal" for entrepreneurs starting CSAs (FCSAB3). Sometimes when villages are approached by an urban entrepreneur about leasing land, the terms demanded by the village include employment on the farm for a certain number of peasants (FCSAB3).

This commons approach to rural land complicates the economic relations. Land is not simply a means of production or a cost for the entrepreneur as understood from a capitalist perspective. Rather, land is seen as a social safety net by the villagers who hold usage rights. Global north scholarship typically understands land access as an elite attribute and much AFN scholarship sees injustices in ways in which women, people of colour, or the poor are excluded in AFNs because of their lack of access to land (Bedore, 2010). In China's AFNs a more complicated dynamic emerges. While peasants remain marginalized in many ways (discussed in Chapter 7), the demand for land to start CSAs by urban entrepreneurs begins to change these power relations. The peasant farmers and villagers in these AFNs are not dispossessed villagers at the service of urban food projects, as one might think of migrant labourers in the global north for example. Rather, the commons approach to land gives at least a small degree of control to marginalized villagers and peasants, while 'privileged' urban entrepreneurs, seeking to respond to market opportunity, need to negotiate for it. In this way, these land relations are a reversal from those studied in global north AFNs, where a "moral and economic primacy over farming and other occupations" characterizes "American agrarianism" and results in inequities of private land ownership (Allen, 2010, p. 300).

4.3.2.2 Focus on Livelihoods and Decentering Surplus

As scholars have documented in the global north (DeLind, 2003; Feagan & Henderson, 2009; Galt, 2013), CSAs typically are not engaging in the same profit-maximizing logic that characterizes their mainstream counterparts. In China as well, AFN farms are focused on building sustainable livelihoods. Alternative economic scholars suggest that the degree to which alternative capitalist and non capitalist practices and institutions can sustain livelihoods is a key measure of their economic significance (Fickey, 2011). I found a strong focus on livelihoods among the CSA farmers I interviewed. As one CSA farmer said, "The first goal should be to solve the farmer's employment problem and make sure they can earn a living; the second is business profits" (FCSAB4). All of the larger (over 50 shares) CSA operators responding to the survey I conducted indicated that their CSA operation was their primary source of income, contributing over 75% of the revenue in their households.

This focus on livelihood or 'making a living' guards against the capitalist practice of surplus being accumulated and removed from the community. These AFNs effectively limit the flow of surplus out of the network by distributing wages to the villagers as described above, and by relying on self financing. I found all but one (the dairy I described above) of the CSAs, buying clubs and markets in these AFNs to be self-financed. While some of the farms received state support for infrastructure enhancements on their farms (greenhouse construction in particular) (FCSB4, FCSB5, FCSAJ2, FCSAB3), there were no private investors to influence or extract surplus from these networks. This leaves greater surplus for re-investment in the networks and indeed re-investments into the farms were extensive. Interviewees told me they were using surplus revenue to invest in new cropping approaches, (FCSAB3, FCSAB5), learn new ecological farming methods and practices (FCSAJ2, FCSAB3), buy books and resource material (BCB1), organize training events (FMB1), purchase food to distribute to families in need (FMC1, BCB1) and/or hire more villagers as workers (FCSAB3). This reinvestment of surplus into social and ecological improvements, or 'growth by deepening' (Van der Ploeg, Ye & Schneider, 2012), versus expansionary growth, has been noted in global north CSA research as well (Cameron, 2010). It represents a "reservoir of social wealth" (Gibson-Graham, 2001, p. 26) that opens up possibilities in these networks. Further, it keeps these networks autonomous

and only 'partially integrated' with dominant capitalist economic forces (Zhang & Donaldson, 2010).

4.3.2.3 Discursive Construction of the 'Social Economy'

While China's AFNs have a strong pragmatic emphasis, they cannot be characterized *only* as such. In addition to the material practices in these networks described above, I found a pervasive discourse on the 'social economy' throughout my interviews, illustrating the ways in which China's AFNs are trying to negotiate what they perceive as a contradiction between market-oriented projects and social goals. CSA operators, farmers' market volunteers and buying club organizers in these networks all relayed a tension between market pragmatics and the ideals of a new movement they are trying to build. Interviewees struggled to find language that best describes their networks, often using the phrase the "*social economy*" (FCSAB4, BCB1, FMB1) in trying to describe a space between capitalist and state-socialist. Indeed academics associated with these networks (Hale, 2013; Pan & Du, 2011) as well as academics from the global north (Amin, 2009; Quarter, 2010) employ the social economy as a construct to describe this alternative space and initiatives that engage in market based activities as a means of addressing community needs. In China, however, there is no legal framework that legitimizes this space, so it exists only in people's ideas. One interviewee shared her frustrations with this situation:

After some time we found our business model as a social enterprise not a for-profit business. We want to function as a bridge between consumer and producer and we think we have the potential to contribute to society and help people. We want to use the term 'social enterprise' but no legal framework exists in China to permit this, and we have no choice but to register as a business. This devalues our work.(BCB1)

Searching for a 'social economy' is also evidenced by the way in which some operators in these networks struggle with consumerist ethics in their CSAs. Registering as NGOs is "almost impossible" (FMB1), so they need to rely on market-based exchanges to earn operating funds. However, the same middle class consumerist ethics, that make these networks possible, are not easily accepted by many AFN participants who are frustrated by what one

person described as "consumer domination" (FCSAB6). As another CSA operator noted "shareholders make unrealistic demands, such as food that is not in season, and perfect looking and they are not always interested in helping to preserve traditional growing methods." (FCSAB3). This is a conundrum the AFN organizers and producers struggle with as they try to evoke a different ethic. To illustrate, the guidelines for one CSA explicitly state, "We do not 'regard consumers as god'. Each one of us is a part of this social movement. We and our members are not simply selling-purchasing agents, we are equal partners, and we trust each other" (FCSAB4). This struggle with dominant consumerist ethics is also evident in the way the CSA operators in these networks explicitly distance themselves from large more corporate farms using CSA as a branding term. As one operator noted, "They are not competitors with us, they are not like us, they don't build connections to the farm ...we are not one of those on-line firms, they have more capital and the capacity to get big but they are just trying to sell things. We are doing more than that" (FCSAB5). Such comments coupled with grasping for a social economy illustrates the 'other-than-capitalist' ethics in these networks.

This analysis illustrates that AFNs in China are characterized by economic diversity, wherein capitalist relations involving waged labour, financial investment, and surplus extraction, co-exist in exchange relations with peasant economies characterized by self-labour, self-provisioning, a focus on livelihoods, and spaces of peasant empowerment. These AFNs are built on a foundation of a commons approach to land. In peri-urban China, where land is in high demand, landless, urban entrepreneurs seeking to capitalize on what they perceive to be a direct-to-consumer marketing trend, are placed in a position of negotiating with peasant villages to access land and labour. The results are mixed. While CSA operators lament the rising cost of land and the difficulties in negotiating for it, many of these entrepreneurs are actively expanding their farms, suggesting that access to land is not a barrier. At least in a small way, having to negotiate with peasants for land use serves to moderate urban-rural power relations. Further, while capitalist commodity relations are evident in these networks, and are perpetuated by consumer subjectivities and concerns over price, convenience and product quality, we do not see the same path toward de-peasantization that some argue is occurring more broadly in China's agrarian economy.

In these ways, these networks embrace an other-than-capitalist ontology and are employing language of the social economy as they search for a way to mediate the conflicts they see between capitalist relations and social goals like building urban-rural. This is not to say that relations are always fair and just. Indeed (and as will be explored further in Chapter 7) migrant labour can be marginalized in these networks in the same way it is in the mainstream food economy. But the diversity revealed in these networks suggests that participants are negotiating interdependencies, and developing economic arrangements that reflect these interdependencies or their 'economic-being-in-common'.

4.4 Economic Hybrids of Capitalist and Other-than-Capitalist Forms

In reviewing alternative economic theories, Fuller et al. (2010) describe the 'rift' between 'make-believers' and 'skeptics' of economic alterity. They suggest that if indeed such a rift exists, it could be mended by closer empirical work on alternative social institutions and structures. Responding to this suggestion this chapter has embraced such an empirical analysis of China's AFNs.

I began with an overview of China's agrarian reform processes and outlined how the unique dual citizenship system and land rights reform processes have shaped the context of AFNs. Despite a commons approach to land which, to a degree protects against classic peasant dispossession, capital is none the less penetrating China's countryside. Similarly, drawing on global north AFN scholarship I outlined how AFNs have been criticized as 'market based' alternatives that will inevitably also be overtaken by capital processes and neoliberal subjectivities, in a 'there is no alternative' argument. In response, I described how emergent thinking on post-capitalist diverse economies and new peasantries is challenging this view and revealing hybrid relations, such as those seen in AFNs, where capitalist and non-capitalist relations are entangled, and where markets present opportunities to reproduce the peasantry not eliminate it. Seeking 'other-than-capitalist' relations in China's AFNs, I used Gibson-Graham's Diverse Economies Framework to unpack economic 'alternativeness'. My analysis recognizes the diversity of economic life and revealed that these networks sit in a contradictory place where capitalist and other-than-capitalist market forms interact. There is indeed an instrumental and entrepreneurial spirit at the centre of these AFNs but they are not 'simply'

reproducing mainstream economic relations characterized by individual consumerist ethics. Rather, they demonstrate a space beyond the capitalist mode of exchange, through their emphasis on livelihood and subsistence ethics, their reliance on self-financing, the ways in which surplus is re-invested and the ways in which operators evoke the discourse of the social economy. Further, this analysis adds voice to suggestions of re-peasantization processes (Van der Ploeg et al., 2010). In China's AFNs, peasant forms of agriculture co-exist with processes we can understand as 'de-peasantization' as well as 're-peasantization'.

Of course, economic relations are but one characteristic of AFNs. In the chapter that follows, I develop a second lens through which to view these networks, and consider the ways in which relations are being negotiated with the non-human world.

5.0 Ecological Hybrids of Traditional and Modern

The previous chapter looked at how capital is beginning to penetrate China's agrarian economy and how AFNs mediate the dualism of other-than-capitalist and capitalist relations. In this chapter, I shift the focus to another grand binary that shapes China's AFNs. Global agro-food systems research, policy and practice can be seen as falling loosely into two camps. The dominant model operates within an ideology of productivism that sees agricultural land as a resource base or 'production platform'. This model relies on energy intensive inputs and farm monocultures that characterize industrialized agriculture. This is an approach that disconnects people from food production and associated ecologies, and in turn, results in a number of environmental, social, and economic crises (Weis, 2010). The other perspective argues that it may be true that the world needs to produce more food. But this focus on productivity needs to be balanced with greater attention to how food is produced and the interdependence of people and nature (Halberg & Muller, 2013). Following this second view, AFNs are founded on various approaches, frequently described under the umbrella of 'ecological agriculture'. While this scholarship continues to espouse values of 'organic' (Andree et al., 2010; Jarosz, 2008; Ilbery et al., 2010), details of farming practices that characterize these networks are often not elaborated. This vagueness reflects the observation that around the world two general trajectories of organic agriculture have been theorised: a formal sector where practices are defined and codified (certified organic), and a more informal agro-ecological sector (Parrot et al., 2006). The latter approaches have been variously referred to as agro-ecological, ecological, non-certified organic (Halberg & Muller, 2013), passive organic or de-facto organic (Parrot & Marsden, 2002) to name a few. In this research, I embrace a broad view of 'organic', taking as my point of departure the International Foundation of Organic Agriculture Movements (IFOAM) definition established in 2005:

Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and good quality of life for all involved. (IFOAM, Definition of Organic Agriculture, para 1)

While this definition might include traditional agricultural practices, traditional farming per se is not necessarily organic. As Halberg & Muller usefully clarify "non-certified organic agriculture refers to organic agricultural practices by *intent* and not by *default*" (2013, p. 22, emphasis in original).

Following this broad definition, this chapter looks at the ecological relations in China's AFNs with particular attention to the ways in which they define and manifest organic production approaches in the context of a state-led, technologically-driven productivist approach to ecological agriculture development. The chapter's analysis resists on two related issues. First, drawing on expert consensus on key indicators of functional integrity in agricultural systems, I look at the ways in which farming systems in these AFNs enhance biological diversity, demonstrate closed-loop systems and protect soil and water resources (Halberg, Tybirk et al., 2004; Luttikholt 2007). Second, I examine the ways in which lay participants in these networks conceptualize and negotiate what they understand as organic and ecological. Here, I detail the ways in which AFN participants are contesting the state-led organic regulatory process and using civic process to codify practices and define organic for themselves. To preview some results, I find that practices in these AFNs, while being strongly ecological based on the functional integrity indicators I selected, are none the less influenced by the dominant focus on productivism and are missing some fundamental ecological practices as a result. At the same time, there is an extensive adoption of traditional practices that the state-endorsed version of ecological agriculture has abandoned. Further, reacting to a widespread distrust of state-led organic and ecological agriculture intuitions, producers and consumers alike in these networks are forging bottom-up alternatives to ensure transparency, reconfigure state standards and construct their own meaning of 'organic'.

As background to this analysis, I begin by describing how, in both the global north and China, the underlying tension between productivism and ecological approaches has shaped how organic agriculture is understood and practiced. The organic sector in the global north has been challenged to maintain its original ideology in the face of growing market pressures. In particular, I focus on the question of 'who decides' in relation to the narrative of global north

organic standards. I describe how AFNs in the 'beyond organic' movement are working to recall the ideology of the organic movement from productivism through lay approaches to standard development and verification. Then I turn the discussion to China where the development of 'Chinese Ecological Agriculture' (CEA) has been situated in a modernization path that focuses on science, technology and productivism. In this context, I situate China's emerging organic sector in the context of standardization and limited civil society involvement.

5.1 The Organic Story: From Movement to Industry and Back Again

This section offers a general assessment of the trajectory of the organic movement in the global north. I summarize how what began as an ideological movement changed under neoliberal market pressures that favoured producing more for less, into a system of codified practices, which in turn stimulated responses to re-claim the movement's original values. I conclude the section by looking at the ways in which AFNs around the world are re-claiming organic standard setting and moving organic governance beyond the realm of experts, to include lay voices. The purpose of this brief review is to demonstrate how the organic movement has been pulled back and forth on a continuum between the two 'camps' of productivism and ecological agriculture.

5.1.1 Origins of the Organic Movement

Several historical accounts of the organic sector (Hill & MacRae, 1992; Lockeretz, 2007; Reed, 2010) have been written and it is not my intent to repeat this detail here. Indeed, authors describe the trajectory surprisingly consistently. What has come to be understood as the organic movement began in parallel with industrialised agriculture in the global north in the 1920s, first throughout Europe and then migrating to North America and Australia. Early protagonists came together in various associations (e.g., Demeter International in Germany, the Soil Association in the UK, Rodale Press in the US, The Land Fellowship in Canada) to resist the accelerated use of synthetic fertilisers and pesticides, particularly after the second world war. The movement's ideas consolidated in the 1960s-70s with the impetus of critiques like Rachel Carson's *Silent Spring*, and linked with broader social movements about loss of farmland and environmental concerns to develop a holistic view on nature-society relations and

the economy. Historical scholars observe that the movement 'de-radicalized' during the 1980s and embraced the idea of ethical consumption as a central ethic and this paved the way for market expansion (Reed, 2010).

5.1.2 'Standardization' and 'Organic Lite'

Since the 1990s scholars have suggested that organic systems have been losing their 'alternativeness' and in the face of globalization and neoliberal pressures the 'movement' has turned into a 'sector' (Buck et al., 1997; Best, 2008; Guthman, 2004). Responding to economic opportunities, farms and firms have consolidated, differentiated and become significant global players (Adams & Salois, 2010). What was once a production approach linked to small farms, biodiversity, community engagement and animal welfare, has shifted to a global organic market (Howard, 2009) and become 'conventionalized', prompting scholars to call for "alternatives to the alternatives" (Guthman, 2008, p. 441).

While social science scholars debate this 'conventionalization thesis', scholars based in biological and ecological sciences argue that, even if organic farms have grown in size and the sector has industrialized, soil, water and air resources are still better off because of it. A significant number of reviews (Gomiero, Pimentel & Maurizio, 2011; Lynch, MacRae & Martin, 2011; Lynch, Halberg & Bhatta, 2012) have compared organic and conventional farming approaches in terms of their resource use and environmental impacts. My purpose here is not to interrogate these reviews. Suffice to note that their general conclusion is that when a full range of factors are considered as a holistic system, organic systems are advantageous in terms of their energy use, greenhouse gas emissions, nutrient efficiency and cycling, soil and water quality, and species biodiversity.

Consumers however, seek assurances. As the organic sector grew, consumers in local and distant markets began to seek more information and verification about unseen production methods. In response, initially groups of farmers developed 'peer certification' processes, resulting in a confusing array of organic labels. This chaotic landscape, along with trade over larger distances prompted the organic community to press for organic regulations (Reed, 2010). In less than a decade, these organic regulations and verification processes have become

intensely contested and the scholarship on agri-food standards has exploded (Burch & Lawrence, 2007; Busch, 2011; Fuchs, Kalfagianni, Clapp & Busch, 2011; Higgins et al., 2008; Higgins & Larner, 2010; Howard & Allen, 2006; Mutersbaugh, 2005). Situating their analyses in the context of trade liberalisation, scholars argue that private interests in standards have become increasingly powerful as states have retracted their involvement. In terms of organic standards in particular, these private interests have been able to influence standard setting processes to their advantage and diluted standards to the "lowest common denominator" resulting in minimalist national standards (Mutersbaugh, 2005, p. 2039).

In the 1990s, when the organic sector had approached only 1% of the total food sales in the US for example, corporate participation dramatically accelerated, driven by profit goals rather than a commitment to movement ideals (Jaffee & Howard, 2010). As corporations saw potential in the budding organic market, they increasingly engaged in a "corporate countermovement" (Howard & Allen, 2006, p. 23), involving themselves in standard setting processes in order to make sure the resulting standards didn't pose barriers in the industry. Relying on a strategy known as 'regulatory capture', corporations positioned themselves to influence states developing organic standards (Fridell, Hudson & Hudson, 2008; Jaffee & Howard, 2010). The result was referred to as 'organic lite' (Guthman, 2004), where the production practices codified in became progressively weakened (Buck et al., 1997; Guthman, 2000).

The scholarship and debate on 'standardization' is also driven by justice concerns, with scholars noting that organic (and other food quality) standards often show a distributional effect by adding a 'policy rent' or additional required cost which further marginalizes smaller scaled firms and farms in both the global south and north (Guthman, 2004). Thus standards result in a form of social exclusion, sometimes marginalizing the very farmers who were the pioneers of the organic movement. This social justice perspective goes beyond concerns about the cost of certification processes to include questions of inclusion in standard setting processes. In liberal democracies, legitimacy of standards is underpinned by participation, transparency and accountability, and as private actors have moved from "objects to subjects" of governance (Fuchs et al., 2011, p. 335) we need to consider these democratic values.

Regarding standards as "politics by other means" (Kimura, 2010, p. 5), consideration of *who* decides is at least as important as what is decided, or 'Whose rules rule?' (Friedmann & McNair, 2008).

5.1.3 Beyond Organic

These problems of standardization and conventionalization have given birth to a 'beyond organic' or 'post organic' movement, where farms and firms turn toward local and direct-to-consumer types of retail channels, where third party verification might be less important to consumers, and the organic movement can return to its original holistic roots (Higgins & Larner, 2010). Protagonists of beyond organic frequently eschew organic certification, which they see as corporatized, and instead seek to mitigate the effects of conventionalization through forms of association, participation and governance that re-connect producers and consumers through AFNs. These AFNs seek to take back the definition of 'organic', and embrace the aspects left out of the standards such as the need for living wages for producers and justice for farm and food workers. To this end, scholars argue that simply fine-tuning and tinkering with standards and standard setting processes will not lead us to necessary transformative change. Instead, we need to re-value lay knowledge (Goodman & DuPuis, 2002). However, given definitional challenges that lead researchers to focus on codified or certified organic production, questions about the degree to which this 'beyond organic' movement is embracing ecological production, as envisioned in IFOAM organic principles, agro-ecological principles, or other principles, remain largely unanswered.

Whether public, private or a hybrid, standard setting processes typically draw legitimacy from their basis in 'science' and credibility from the role of 'experts' in their development and accredited certifiers in the auditing process. These processes typically presume that consumers' wishes and demands are known *a priori* by experts, and thus lay people are involved marginally if at all (Kimura, 2010). The underlying assumption is that food governance, particularly the matter of food quality, is better based on science and such "science-doing" necessitates experts (Kimura, 2010, p. 135). As Nelson et al. (2010) observe, as the local has been reconstructed in these beyond organic AFNs, so too has the concept of lay/peer versus scientific/expert knowledge as the starting point for certification resurfaced. In

response to the need for some type of verification, in parallel to trust building processes, a variety of systems have evolved in AFNs to democratise standard setting processes based on lay knowledge. Building on processes like 'citizen juries', that challenge the privileged position of experts, verification systems led by lay-people have been rapidly evolving within the AFN movement, including in China as argued below. As a prelude to that discussion, I briefly describe two such systems - the 'certification by many' system in Japan (Kimura, 2010), and the Participant Guarantee Systems (PGS) advocated by IFOAM (Kallander, 2008). I have selected these particular examples because the evolving standard development and governance in China's AFNs shows characteristics of both.

5.1.3.1 Participatory Guarantee Systems

Most widely associated with IFOAM, Participatory Guarantee Systems (PGSs) are created by farmers, consumers and/or NGOs, in order to lower the costs of the dominant 'third party' system, yet respond to the need for some type of verification beyond each individual consumer visiting each producer or processor to verify processes. In some ways, PGS is how organic certification began, with small groups of peer farmers agreeing to standards and putting them into practice. IFOAM defines PGS as verification systems that are built through active participation of stakeholders working together in networks of trust (Kallander, 2008). Whereas a third party certification system verifies production processes against an agreed upon (usually state established) set of standards, PGS are based on lay/peer review and shared responsibility. These approaches are rapidly spreading throughout the global south and north because unlike third party systems, they can include social issues such as labour standards, in addition to production approaches. Sometimes PGS verify production against the state standards for that country. In other situations, PGS participants develop their own standards. IFOAM's role in these systems is to facilitate and assist their development, not prescribe details or impose rules. The only requirement is that the standard used in PGS must reflect the IFOAM organic principles (Kallander, 2008). China does not yet have such systems place, but Vietnam had such a system approved by IFOAM last year (Vietnam Organic, 2013). Using their national standard as the reference, the Vietnamese PGS uses an elaborate checklist, a list of approved inputs and a system of annual inspections. Indeed the system seems as detailed as the national organic regulation, and addresses issues of genetic engineering, whole and part farm

conversion, development of organic plans, organic husbandry, processing and handling, and a number of other issues.

5.1.3.2 Seikatsu Club Consumer Cooperative (SCCC) in Japan

An interesting illustration of consumer engagement in lay certification is found in the Seikatsu Club²¹ in Japan. Kimura (2010) describes in detail the Independent Audit by Many (IAM) system that has formed the basis of the Seikatsu Club Consumer Cooperative (SCCC) movement. She argues that IAM offers a more democratic approach to food quality standards through its inclusion of both lay people and experts. Further the IAM offers an affordable alternative to 'third party' standards, as well as providing opportunities for vertical (between consumers and suppliers or farmers) and horizontal (among consumers) relationship building. Initiated within the context of continuing food safety scandals in Japan, today the SCCC movement engages over 30,000 members in 29 cooperatives with 1,200 staff, and sales over US \$700 million annually (Kimura, 2010). It began in 1965 when a group of women organized 300 other women to purchase 200 litres of milk each week in order to get a better price. From there the idea grew and the organization formalized. As the range of products purchased and the interests of the purchasers diversified, it became evident that there was a need to develop an agreed-upon set of principles to govern procurement. Ten principles became the foundation of their 'standard': food safety, domestic food self-sufficiency, reduction of harmful materials, use of natural resources, reuse and waste reduction, reduction of energy use, minimizing risks, full disclosure, independent audit and open participation. Their principles fully embrace the IFOAM organic principles (Kimura, 2010).

This discussion illustrates how the growth of the organic sector attracted corporate interests which came to impact organic standard setting processes, shifting them toward conventional production. In response a beyond organic movement has begun to remove standard setting processes from an exclusive space, where only particular people are presumed as eligible to speak authoritatively, and place the development of standards and rules with the

²¹ The Seikatsu Club in Japan is often confused with the Teikei movement and both are credited as helping to advance the development of the CSA model throughout the global north. Seitkatsu is a larger movement of formally structured cooperatives that is often integrated with the less formal Teikei movement. In both, urban consumers band together to build direct procurement relations with producers.

consumers and producers who are the most affected by them. I turn now to the China context, where I detail the development of its ecological and organic sectors.

5.2 Ecological and Organic Agriculture in China

China's agricultural modernization trajectory rests on a stark reality. It has 21% of the world's population but only 9% its arable land (Carter, Zhong & Zhu, 2012). In this section, I contextualize the development of China's ecological and organic sector. I illustrate how the sector's development has been driven by the state's dual focus on food security, as well as science and technology. Second, I describe how in the context of growing food safety concerns, global trade opportunities, and the growing agro-environmental crisis that threatens long term food security; the state has developed a complex system of progressively stringent ecological standards, including an organic standard. I contrast these standards and describe their associated markets. Finally, I conclude this section by looking briefly at the role played by civil society in China's ecological governance. My goal in this discussion is to establish a background upon which to consider the ways in which China's AFNs define and manifest organic production approaches in the context of state-led, technologically-driven, productivist approaches to agriculture.

5.2.1 Chinese Traditional Agriculture

China has been a society with rich agricultural practices for centuries (Christiansen, 2009). F.H. King's book, *Farmers of Forty Centuries, or Permanent Agriculture in China, Korea and Japan*, is considered the first English description of these practices (1911). King's descriptions informed the work of organic pioneers Eve Balfour and Albert Howard in Britain, Ehrenfried Pfeiffer in Switzerland and Jerome Rodale in the USA, and is widely considered a foundational document of the present day organic movement. King's call for a world movement for agricultural reform foreshadowed the 1978 formation of the International Foundation of Organic Movements (IFOAM) (Paull, 2011).

King was a US soil scientist and his intention was, "to walk through [the] fields of ...these oldest farmers in the world....[and to] learn how it is possible, after twenty and perhaps thirty or even forty centuries, for their soils to be made to produce sufficiently for the

maintenance of such dense populations" (2011, p.3). Based on an 8 month agricultural tour in 1909, King differentiated Asian traditional agriculture from what was being promulgated by the US Department of Agriculture, with the descriptor 'permanent agriculture' (King, 1911). His book, which is more of an anthropological approach than a quantification, paints a picture of small scale, household-based farmers, depending on largely non-commoditized relations for the household's reproduction, using experiential learning passed down through generations. King died before he could complete his work, so his book has no conclusion.

As I review his descriptions and stories, several themes seem to tie together the diverse forms of traditional agriculture he documents. The stories depict farms where there is no such thing as 'waste'. Rather, there is continuous recycling of diverse materials back into the soil. King describes how farmers used crop residues for cooking fuel and then returned ashes to the field. He details the labour intensive practice of enhancing anaerobic fermentation of canal sludge, plant straw, silk worm waste and animal manure, before field spreading. In the systems King describes, livestock are typically integrated into the farm and their manure, along with that from the household ('night soil') were composted for use on the fields for fertility. Other fertilizers included soybean oil cakes, green manures, sludge dredged from canals and silkworm wastes. These fertilizers were crop-specific, and farmers experience with regard to the plant's growth pattern and leaf colour were used to determine application. Most stories seem to reflect an understanding of the time horizon as extending well beyond the current season. They refer to multiple year rotations for example. The stories reflect an 'art' or experiential aspect of farming, where decisions are not pre-determined, but instead are made 'in situ' depending on factors like weather, available materials and household needs. Finally, and the feature that inspired the book's title, King reveals complex and intensive intercropping systems that mimic nature with year round soil coverage and symbiotic relations between planted crops. For example, he documents the rice-fish-duck systems in Central and South China, the mulberry dike-pond sericulture in the Pearl River Delta and the agro forestry practices in the mountainous Yunnan province.

There have been recent efforts to continue King's work and document China's diverse intercropping systems (Ellis & Wang, 1997; Li, 2001; Li, Liu & Min, 2011). For

example, Li Wehuna (2001, p. 13) offers a detailed description of more than 50 "integrated farming systems" classified as follows:

- Systems that integrate components from the same production sector. Examples include poly-aqua-cultural systems that integrate culture of various aquatic species, or various dryland rotation systems such as maize-peanut, or onion-cotton.
- Systems that integrate components from different production systems. Examples include frog production channels integrated between the rows of fruit trees, and aqua-terrestrial systems like mulberry-silk-fish, where where tree refuse and worm excrement fall into ponds to encourage plankton growth for fish.
- Systems that are designed for particular scales of production. For example, closed-loop integrated production around a homestead scale where crop stalks are used as livestock feed, followed by mushrooms grown in the manure, then earthworms are grown on the used mushroom media before it is re-applied to cropland.
- Systems that are designed for particular ecosystem types. For example, terrace rice systems that stabilize hillsides in mountainous regions, and grape systems in temperate areas where specifically designed trellising conserves soil and water while protecting fruit from frosts and wind.

It has only been in the last 50 years that the focus has shifted from self-reliant diverse farms to an input intensive culture (Zhang, Min, Liu & Cheng, 2012). The processes of nation-wide collectivization of agriculture under the People's Republic of China, as well as the decollectivization and 'opening' during the reform period that followed, were both framed within a productivism that de-emphasized China's rich history of traditional practices and gave little attention to potential negative environmental impacts (Sanders, 2006). This productivism is framed by a political philosophy that centres food security as well as a historical and cultural embracing of science and technology.

5.2.2 Political Philosophy of Food Security

The traditional belief in the Dynastic Cycle (recall the story of the Mandate of Heaven that began this dissertation), illustrates the philosophy that securing the food supply,

protecting against famine, and maintaining harmony, are essential if the state wishes to maintain political legitimacy. Food security, in particular grain self-sufficiency, is embedded in Chinese political legitimacy. Providing sufficient food is the way in which political support is solidified. The state faced a legitimacy crisis linked to food insecurity at the start of the reform period when 250 million out of 800 million rural residents were impoverished and hunger was widespread (Zha & Zhang, 2013). Famine and hunger are deeply ingrained in people's memories perhaps more so than any other civilization (Li, 2007). To illustrate, in the 1920s at least 500,000 people starved to death and almost 20 million were left destitute. In the 1940s somewhere between 2-3 million people died in famines in Henan Province. Only a few years later between 1959 and 1961, starvation during the 'Great Leap Forward' killed an estimated 30 million more people (Zha & Zhang, 2013).

This political philosophy mingles with people's memories of famines and results in a generally heightened importance of food in China (Simelton, 2011; Tong, 2011). As I heard several times in my field work, "Food is God". Indeed the standard Chinese greeting, rather than "hello", is Ni *chile meiyou*? or literally, Have *you eaten yet*? reflecting a history of food insecurity and the central place of food in society (Zhang et al., 2006). With a population increasingly demanding dietary diversity and more meat, coupled with pressures on land from increasing urbanization, food security is an ever-present concern in China and has continued as a state priority since ancient times (Carter, Zhong & Zhu, 2012; Li, 2012; Zha & Zhang, 2013). China's commitment to food security is also driven by the state's interest in protecting farmers in a sector that still employs more than one third of the labour force and to address rural-urban inequities (Zha & Zhang, 2013). Domestically produced grain can't compete with heavily subsidized grain from industrialized countries, so the state seeks to buffer its farmers from price downturns to ensure political stability (Zha & Zhang, 2013).

China's perception of its image in the world also motivates its food security policies. The state remembers the economic sanctions it experienced in 1959 when its people were suffering the worst famine in recorded history, and remains distrustful of reliance on an international food regime (Tong, 2011). Since its accession to the WTO in 2001, there has been even stronger attention to food security by the Chinese state. China recognizes, as the world's

largest food consumer, that reliance on trade would destabilize global markets considerably, and this has reinforced its food security policies (Wong & Huang, 2012). Starting in the 1990s, to counter suggestions that it would destabilize global food prices if imports increased (Brown, 1996), China responded with a range of policy instruments to stimulate agricultural production (Huang, Wang, Zhi, Huang & Rozelle, 2011). Policy actions to ensure it met food security targets included the 'governor's grain bag' and the 'vegetable basket' which obliged cities to endorse food security targets and meet grain and vegetable quotas (Huang et al., 2011). While initially successful, these measures proved insufficient as yields began to drop in the late 1990s. In response, the state spent US \$21 billion on a new series of economic policies including reducing agricultural taxes and subsidizing chemical inputs. Since that time, China has met its 95% grain self-sufficiency²² targets across all food categories (Carter, Zhong & Zhu, 2012; Morton, 2012).

5.2.3 'Technoscientific Reasoning'

It is not only the pursuit of food security that drives China's productivist approach. A "utilitarian" ideology (Shen & Williams, 2005, p. 205), in which an overwhelmingly positive and pragmatic view of technology is detached from social and political processes, further informs its agricultural approach. This 'scientism' can be traced to ancient China and continues today as a foundation of China's modernization and rapid economic growth (Shen & Williams, 2005; Chen, 2013). Scholars argue that the Asian approach to science and technology is distinct and has penetrated society more deeply than elsewhere (Shen & Williams, 2005). They describe a predominance of "technoscientific reasoning" (Sigley, 2009, p. 537), in which knowledge based on a claim to truth uncovered only through specific state-approved processes, has become the foundation of the socialist market economy (Sigley, 2009). The fundamental belief that scientific reasoning should be applied broadly across all fields of human endeavours has strong historical roots in China. From the early 1900s on, seeing the technological advancements in western cultures and fearing backwardness, China saw science as its future and traditional ideologies and beliefs as backward (R Chen, 2013). China's worldview became

²² There growing debate as to the degree of food self-sufficiency in China. Other scholars suggest that recently this number has fallen to 85% food self sufficient. Estimates vary depending on the definition of 'food security' used. In particular there is debate about whether animal feed, such as soybeans, should be considered a 'grain' and thus included in the definition of 'food security'.

oriented toward science as a transformative ideology. The Mao era served to amplify this technoscientific reasoning by developing science and technology at the expense of social sciences, where the emphasis was limited to economic and quantitative analyses that could be used to monitor technological progress (Shen & Williams, 2005). This overwhelmingly positive and pragmatic view of science and technology was further amplified during the reform era, when the 1978 constitution declared, "the state devotes major efforts to developing science, expands scientific research, promotes technical innovation and technical revolution and adopts advanced techniques wherever possible in all departments" (Shen & Williams, 2005, p. 209).

5.2.4 Embracing Productivism

Driven by this uncritical approach toward science and technology, and the preoccupation with food security, during the Mao era as well as during the reform period, China carried out a range of agriculture reforms that replaced traditional practices with chemically intensive cultivation. For the Chinese state, "production was granted as an absolute human priority" and agriculture was viewed as another means by which the state could "increase output by increasing input" (Christianson, 2009, p. 125). The result was that in the 1980s and 1990s, China's agricultural sector (farming, forestry, animal husbandry and fisheries) grew 300% (Carter et al., 2010). Fisheries grew the most rapidly (annual growth rate of 6.8%), followed by animal husbandry (5.9%), forestry (3.9%), and farming (2.9%) per year, over the 31 year reform period. Looking more closely at the farming sector, grain output grew at a rate of 1.8% over the same period, and surpassed the rate of population growth (Carter, 2012). These increases were primarily because of increases in yields under extensive input use (described below), rather than increases in acreage under cultivation (Carter, Zhong & Zhu, 2012). As notable examples, yields per hectare of rice (65%) wheat (157%) and corn (88%) all rose since economic reforms began in 1979 (Carter et al, 2012).

In comparison, non-cereal cash crops grew even faster. Oilseed production, for example, increased by 6.0% per year, reflecting an increasing demand for edible oils. Cotton production grew at 4.4%. But more significant increases were in the fruit and vegetable sector. Outputs of fruit grew 11.7% per year, increasing from 6.6 million tons in 1978 to 204 million

tons in 2009. Official vegetable production statistics are not available, but area sown to vegetable crops increased 5.7% annually, over this same period, from 3.3 million hectares to 18.4 million hectares (Carter et al., 2012). Additional dramatic increases can be found in livestock production. Based on official data, Carter et al. (2012) report that total meat production increased by 66.9% in the reform period, with an annual growth rate of 4.0%, and milk production increased even faster with a growth rate of 13.3%.

These country-wide growth rates mask regional variation not reviewed here in detail. In general, and responding to urbanization pressures, agricultural production has shifted over the reform period away from the coastal regions to the north, northeast and northwest regions, which are less densely populated (Huang et al., 2012). As examples:

- Wheat production declined in the northeast and northwest as farmers there shifted to vegetable and rice production in those areas (Huang et al., 2012).
- Rice production has shifted from the southeast and coastal regions and become concentrated in the north and northeast (Huang et al., 2012).
- Dairy production has grown primarily in north China. While poultry production has shifted to southeast China, primarily driven by sector consolidation and the locations of specialised processors and intermediaries (Carter et al., 2012).
- Central and northwest regions are showing the fastest growth in fruit and vegetable production (Li, 2013) and cultivation of vegetables and fruits is intensifying in the suburban areas around large cities (Carter et al., 2012).

5.2.5 Both a Miracle and a Disaster

Scholars consider it a 'miracle' that China has managed to meet its food security goals with minimal reliance on global markets to date (Carter et al., 2012). Indeed in 2012 China was recognized by the FAO with the Agricola Medal for reducing its population considered undernourished from 18% of its population in the early 1990s to 10% in 2008 (Carter et al., 2012). However, the disastrous aspects to this miracle are being increasingly recognized and China is increasingly turning to global markets to help meet its food security

goals (Carter et al., 2012). Embracing productivism wholeheartedly has resulted in negative environmental impacts. While data sources are few and questionable, a robust scholarship is beginning to reveal the extensive impacts associated with both industry and industrialized agriculture (McBeath & McBeath, 2010; Holdaway, 2013; Gilley, 2012). China's success in meeting its established food production targets has been primarily due to the extensive use of modern inputs which many consider unsustainable. I highlight below how China has accomplished its production miracle and the resulting environmental disaster that is still being revealed. My purpose here is not to undertake a complete review of the ecological impacts of China's productivist approach.²³ Rather, I seek to establish the context in which ecological agriculture is emerging in China.

5.2.5.1 Labour Inputs and Mechanization

China's productivity miracle rests to a large extent on labour resources, and the percentage of the population employed by agriculture has been steadily declining with urbanization. At the beginning of reforms in 1979, 70% of the labour force was was employed in agriculture and that declined to 38% by 2009 (Carter et al., 2012). Given vast migration discussed in Chapter 4, the dynamics of full and part-time, permanent and temporary, on farm and off farm employment are complex, and simply looking at numbers of workers does not give a complete picture of China's agricultural labour. For example, young people are participating in off-farm employment more than older rural residents, and on-farm employment is dominated by 'old' labour (Huang et al., 2012). Further, there is a gender effect worth noting with women more likely to be working as full time farm labourers (Li, 2013). Whether these trends of aging and feminizing of the agricultural labour force will continue, and what effects they might have on production and its sustainability are unknown.

While we often think of China's farms as small and labour intensive, mechanization has been a core strategy in the state's modernizing plans and in boosting productivity. Rising wages in the agricultural sector after the introduction of the Household Responsibility System (HRS), coupled with the availability of off-farm employment and migration (described in

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²³ Nor do I interrogate the associated human health impacts of environmental degradation. For a recent overview see Holdaway (2013).

Chapter 4), promoted the mechanization of agriculture as evidenced by the increasing number of tractors (Fan et al., 2012). The number of small tractors increased from 1.4 million units to 17.5 million between 1978 and 2009, resulting in a 6.5-fold increase in terms of the power supplied by equipment from 117 million kw to 875 million kw (Carter et al, 2012).

5.2.5.2 Over-use of Agricultural Chemicals

Use of synthetic fertilizer has expanded five fold since reforms began, and China now leads the world in both the production and use of synthetic fertilizers (Fan et al., 2012). Chemical fertilizer use increased from 8.8 to 54.0 million metric tons between 1978 and 2009, and applications per hectare increased from 59 kg to 341 kg over the same period. A low fertilizer nutrient use efficiency has been noted, and there are high nutrient losses due to inappropriate application (Zhang & Shen, 2013). Further, fertilization is considered unbalanced. There are large regional variations in amounts used, and while nitrogen and phosphorus have generally been over-used, potassium use has been insufficient in relation, and shows declining balances in multiple soils across China (Zhang & Shen, 2013). As outlined below, this overuse of nitrogen-based fertilizer in particular has resulted in eutrophication of surface water, excessive greenhouse gas emissions (Zhang & Shen, 2013), and soil acidification in multiple regions (Holdaway & Hussain, 2014).

Parallel increases in other agricultural chemicals (herbicides, fungicides, pesticides) as well as agricultural plastics have been noted since the 1970s (Carter et al., 2012). The usage of pesticides increased 2.4 times between 1990 and 2010 to over 17 million tons (Holdaway, 2013; Fan et al., 2012), making China the world's second largest producer and consumer of pesticides, responsible for nearly 35% of all global consumption (Zhang & Shen, 2013). Excessive pesticides have been noted to persist in soil and estimates suggest that some 16 million hectares of cropland in China are polluted by agricultural pesticides (Toth, 2013).

5.2.5.3 Soil Degradation

With over 35% of China's land surface subject to wind and/or water erosion (Holdaway, 2013), desertification is extensive, reaching 33 million hectares of land at last count (Zhang & Shen, 2013). Arid and semi-arid grassland ecosystems are particularly

vulnerable to erosion from wind, which is worsened by over grazing and deforestation (Holdaway, 2013).

Soil organic matter dynamics can vary widely across China's diverse land systems. Country-wide, 38% of the soil suffers from nutrient and organic matter losses associated with erosion (Fan et al., 2012). For example, the average soil organic matter in topsoil in China is 10 g/kg compared to 25-40 g/kg in Europe and the US (Holdaway & Husain, 2014).

Finally, heavy metal contamination of soil, as a result of rural industrial processes, pesticides and manure, is suspected to be a problem that is more severe than in many other countries, although data are scarce and suspect (Holdaway & Husain, 2014). A soil pollution survey undertaken by the state in 2006 has not been made public, and results were recently declared a state secret (Holdaway & Husain, 2014). However, in 2012, a Ministry of Environmental Protection official publically revealed that 10 million hectares of arable land were polluted to at least some degree. Later, a Ministry of Land Resources official clarified that 3 million hectares of farmland had medium or serious levels of pollution, mostly in areas near heavy industry. In 2013, the Ministry of Agriculture began a province-by-province soil survey specifically focused on heavy metals and other pollution, and researchers are awaiting its completion and hoping for its release (Holdaway & Husain, 2014).

5.2.5.4 Declining Safe Water Resources

Agriculture uses 60% of all water resources in China (Wang et al., 2009). Unfortunately, while northeast regions have adequate rainfall, the northern and northwest areas, to which much production has shifted, are becoming increasingly reliant on irrigation. The use of groundwater in these regions has increased from 30% in the 1970s to 70% of all irrigation water (Wang & Huang, 2004), and groundwater tables are significantly declining, by as much as two metres per year, in these areas (Fan et al., 2012). Further, agriculture water use efficiency, defined as grain produced per unit of water consumed, is low in China because of a reliance on inefficient irrigation systems (Liu & Yang, 2012). Pollution of freshwater resources is further reducing the availability of safe water for agricultural production. More than 40% of China's rivers and more than 80% of its lakes show eutrophication exceeding the country's

safe drinking water standards. There has been a four-fold increase in nitrogen leaching to estuaries since 1980, contributing not only to eutrophication, but decreased fish production and algae blooms (red tides). Occurrence of red tides increased from 10 per year in the 1960s to 300 per year in 2004 (Norse and Zhu, 2004). Further, wastewater from industry, which is sometimes used in agricultural irrigation, has been shown to have high concentrations of heavy metals (Khan, Cao, Zheng, Huang & Zhu, 2008). In sum, food crops in China are shifting to areas with fewer water resources, and existing water resources have been significantly impacted by agricultural and industrial pollutants.

5.2.5.5 Reliance an Plant Breeding and Uncertain Plans

China's increasing productivity over the reform period was partly due to breeding programs established in the 1960s that selected for higher yields and dwarf sizes (James, 2010). The collectivization of agriculture prior to 1976 disseminated and entrenched use of these hybrids (James, 2010). More recently, China has pursued genetically modified (GM) crops to increase productivity. In 2010, 3.5 million hectares was sown to GM crops, ranking China 6th in the world (Garnett & Wilkes, 2014). However, GM acreage to date has been limited primarily to non-food crops. At least according to official records, 90% of GM acreage is sown to cotton (3.3 million hectares). China has proposed further use of GM crops, and indeed leads the world in terms of *planned* GMO acreage. However, there has been some hesitation in implementation of these plans due to a strong anti-GMO sentiment in China, primarily organized by Greenpeace (Carter, et al., 2012).

5.2.5.6 Impacts of Recent Dietary Changes

Most recently, trends of increasing meat consumption have added what could be the last straw to this list of disasters. Livestock production and consumption of animal products is positioned at the nexus of economic, environmental, health, trade and ethical concerns in China (Garnett & Wilkes, 2014). It is exacerbating the impacts of almost all of the above environmental problems. Increasing livestock production is driving increased use of water, changes in production patterns and deforestation, water and soil pollution from four billion tons of manure annually, emission of greenhouse gasses across the food chain, and land degradation from over grazing (Schneider, 2011; Garnett & Wilkes, 2014). Indeed, it raises

fundamental questions about food security and the meaning of 'enough' food for China (Garnett & Wilkes, 2014) and ensuing decisions about importing animal feed for example are already having impacts on global land use, trade and livelihoods (Zhang et al., 2012; Garnett & Wilkes, 2014).

5.2.6 Development of China Ecological Agriculture (CEA)

China's productivist legacy is being revealed, and the very changes that helped production soar to meet food security goals, may now be posing the barriers to meeting those goals in the future. Further, the dream of agricultural modernization and the state's focus on food security through science and technology has driven traditional agriculture to the margins where it exists today only in the most remote areas (Li et al., 2011; Shi, 2004). In response, starting in the 1980s a group of scholars introduced 'Chinese Ecological Agriculture' (CEA) as a discourse framed within ecological economics. Understood as a new type of integrated farming system that could harmoniously blend environmental protection, agricultural production, rural economic development and efficient use of natural resources (Wang, Qin, Huang & Zhang, 2007; Li et al., 2011), it became an area for research and development supported by the state. CEA can be understood as a hybrid of traditional and modern agriculture. It takes as its foundation traditional intercropping systems or 'circular farming' (closed loop) systems, where off farm inputs are minimized, and adds to this breeding systems (including GMOs) that stress yields, prudent use of pesticides and synthetic fertilizers (Wang et al., 2007; Shi, 2004).

Recently, reflecting on the progress of CEA, Li et al. (2011) acknowledge the establishment of some excellent models and pilot areas. They describe how the core strategy of CEA has been to look to traditional agricultural practices, reinterpret them in light of China's food security needs and integrate them into China's modern, industrialized agriculture system. They note that these traditional practices framed within subsistence peasant economies, do not easily blend with China's technology-driven approach to agricultural modernization. Whereas the state's modern approach sees agriculture as serving human ends, traditional agriculture in China followed a Taoist eco-philosophy that emphasized self-sufficient and subsistence oriented systems in harmony with nature (Li et al., 2011). Reviews by two different groups of

scholars (Wang et al., 2007; Li et al., 2011) concur that ecological agriculture will not meet the yields required by the state's food security policies if it is only based on traditional practices. These scholars argue that China needs to find an ecological agriculture path different from that of the global north, where sustainable and ecological agriculture often means the avoidance of synthetic inputs and GMOs. Chinese CEA scholars argue that ecological agriculture 'with Chinese Characteristics' needs to embrace "biotechnology and ecological engineering" as well as chemical inputs to some degree (Wang et al., 2007, p. 195).

However, global north scholars note the limitations of the Chinese research approach to CEA. Horlings and Marsden (2011) for example, have examined some cases of ecological modernisation of agriculture in China, Africa and Brazil, and note that for ecological agriculture to contribute to a "real green revolution" a radical approach that weaves together farmers and consumers participating in embedded "eco-economies" (p. 441) is necessary. In the case of China, the state's uncritical embrace of science and technology has resulted in CEA research that has focused almost exclusively on "ecological entrepreneurism" through large-scale, state-sponsored ecological themed villages and construction projects versus more 'grass-roots' producer engagement (Horlings & Marsden, 2011, p. 448). This entanglement of economic growth and ecological improvement is typical of China's ecological modernization narrative about 'going green' that sees market dynamics, entrepreneurship and technology solving environmental problems (Zhang et al., 2012). Research on 'real' farms versus state controlled production bases is necessary if traditional farming practices are to be documented and saved from "becoming victims of modernization and other technological and economic changes" (Zhang et al., 2012 p. 744).

CEA is only beginning to emerge as an academic field in China, and scholars are calling for more state funding (Egelyng et al., 2013). The state seems to have lessened its support for CEA for two reasons. First, de-collectivization of agriculture has made it more difficult to add more large demonstration sites (Egelyng, et al., 2013). Second, the lack of a clear definition of CEA led to coherence problems in supply and under developed markets (Paull, 2008), leading the state to pursue stronger standardization, as evidenced below, in order to develop domestic and export markets.

5.2.7 Ecological Sector Governance

Ecological governance in China rests on a unique system of progressively more stringent production standards for hazardous-free foods, green foods and organic foods (Scott, Si, Schumilas & Chen, 2014). As shown in Figure 8, when taken together, food produced with this 'set' of 'ecological' standards totals 34 million acres or 28% of China's agricultural land (Scott et al., 2014; Mei, Jewison & Greene, 2006). These different standards, compared in Table 5, were introduced by the state starting in the 1980s.

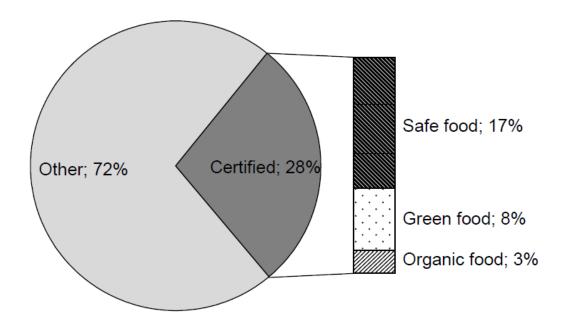


Figure 8: Distribution of Eco-Labelled Food as a Proportion of Cultivated Land in China Source: Paull, 2008

Table 5: Comparison of 'Ecological' Standards

	Certified Organic	Green Food	Hazard-Free Food
	THE SECOND SECON		
Year Established	1994	1990	2001
Production (ha)	2.89 million ha	9.91 million ha	21.19 million ha
Target Markets	Export initially, but domestic market has overtaken exports	Domestic primarily, but some recognition	Domestic
Requires soil and water testing?	Yes – samples must meet at least the second level of restriction in China's soil quality standard	Yes – samples must exceed the first level (most restrictive) of China's soil quality standard	Yes – samples must meet at least the second level of restriction in China's soil quality standard
Requires product testing for residues?	Yes - 0 detection limit	Yes - standard is stricter than for hazard-free food	Yes - needs to meet the national standard for food hygiene
Requires crop rotation?	Yes	No	No
Permits synthetic chemicals?	No use of synthetic fertilizer, pesticide, growth regulators or feed additives	Yes, but limited use of synthetic fertilizer, pesticide, growth regulators and feed additives	Yes, permits use of government approved fertilizer, pesticide, growth regulators and feed additives
Permits GMO?	No	Yes	Yes
Traceability?	Yes	No	No
Regulatory Body	China Organic Food Certification Centre, Ministry of Environmental Protection	Green Food Development Centre, Ministry of Agriculture	Centre for Agri-Food Quality and Safety, Ministry of Agriculture
Verification Process	3 rd party verification at each crop planting	2 nd party verification with annual surveillance	None
Period of Validity	1 year	3 years	3 years

Source: Compiled from Lernoud, Willer & Schlatter (2014), Paull(2008), Scott et al., (2014) and soil testing and residue testing information provided by Dr. Yuhui Qiao, April 13, 2014

5.2.7.1 Green Food

In 1990, the Ministry of Agriculture launched a 'green food' designation in China and established the China Green Food Development Centre (CGFDC) to provide oversight (Paull, 2008; Scott et al., 2014). Green food needs to be produced in areas that meet stateestablished air quality standards, low levels of heavy metals in irrigation water and soil tests, and chemical applications of some pesticides and herbicides are banned (Giovannucci, 2005). There is no requirement for or regulation of specific agronomic practices (such as cover cropping or other soil building practices, or animal stocking rates), and GMOs and/or synthetic fertilizers are permitted (Lin, Zhou & Ma, 2010). Originally, a distinction was made between green food Grade A and Grade AA, with the higher grade AA prohibiting more synthetic chemical inputs and thus approaching the organic standard (Scott et al., 2014; Thiers, 2005)²⁴. In this way, some scholars suggest that the green food standard has acted like a stepping stone to help producers gradually shift to organic production resulting in rapid sector development (Paull, 2007). Green food is produced for both domestic consumption and exports, and recently, China is importing production certified to this standard. For example, in 2008, China accredited 600,000 tonnes of malting barley from the Canadian Wheat board for import annually (Paull, 2008).

5.2.7.2 Hazard-Free Food

In 2001 the Ministry of Agriculture launched the 'hazard-free' food program as the foundation level for agricultural production (hazard-free is also translated as 'pollution-free' or 'no public harm' food). Hazard-free food production follows a less stringent production standard than green food (Sanders, 2006). In researching these standards with colleagues, we have noted that this standard was developed after the green food standard, even though it is less stringent, and indeed is more or less what we could consider 'conventional' agricultural production that uses government regulated pesticides, fertilizers, GMO and other inputs (Scott et al., 2014). Scott et al. (2014) have suggested that the hazard-free standard was announced in response to the difficulties farmers and processors were facing in adopting the lower pesticide requirements of the green food standard. In other words, the state recognized that it needed to

²⁴ Some interviewees indicated to us that grade AA does not exist any longer and has been folded into the organic certification.

move toward ecological agriculture, but initially set the first bar too high in launching the green food standard and did not see the adoption levels they were hoping for. Further, most scholars and farmers in the global north would not classify hazard-free food as an ecological standard. It permits use of synthetic pesticides and fertilizers, as well as GMO seeds and feed. While it is still a voluntary standard at present, it may evolve to become the basic minimum requirement for all conventional agricultural production in China (Scott et al., 2014).

5.2.7.3 Organic Food

In 1994 China introduced its organic label, motivated by promising export markets, particularly for products such as tea where there was a demand in the global north (Lyons, 2008). However, the domestic market, with sales estimated at US \$750 million in 2006, has overtaken exports estimated at US \$350 million (Scoones, 2008). Also in contrast to green food and hazard-free standards, the organic food standard was introduced and developed under the auspices of the State Environmental Protection Agency (SEPA) (now the Ministry of Environmental Protection) as opposed to the Ministry of Agriculture. In 1994 SEPA established the China Organic Food Certification Centre as the first research, certification, training and marketing body for organic agriculture. Today, they remain the largest of China's 23 certification bodies accredited to verify organic production. Initially, China's organic products were certified only to foreign standards, in particular the EU, Japan or the USDA. However, in 2005 China launched its own standard, compliant with IFOAM's principles and Codex Alimentarius, and including aspects from the US, Japanese, and EU programs (Sheng, Shen, Qiao, Yu & Fan, 2009). There are four sub-standards that detail the requirements for food and fibre production, processing, labelling and marketing, and the management of the national organic system. The standards cover fibre crops (notably cotton), agricultural crops, mushrooms, wild harvesting (notably medicinal plants), livestock and aquaculture products (Xie, Tingyou & Yi, 2010). Today, the certification industry is managed by the China National Accreditation Services for Conformity Assessment (CNAS) under the direction of the Certification and Accreditation Administration of China (CNCA), which ensures transparency of certified products and maintains a publically viewable database (Scoones, 2008).

5.2.7.4 The Organic Food Market

Considering that China's organic standard was first developed only in 2005, growth to a position of one of the 'top four' countries with the most organic acreage is impressive. In 2012, China had 1.9 million hectares of cultivated land plus 982,400 hectares of wild collection land in organic production for a total of 2,882,400 hectares or 0.4% of all arable land and placing fourth after Australia, Argentina and the US in terms of acreage in organic production (Lernoud et al., 2014). In March 2012, in response to rising public concerns over food safety, reports of fraudulent organic products in markets, as well as the state's desire for harmonization with the EU, China strengthened its organic standard (Lernoud et al., 2014; BioFach China, 2013; Scott et al., 2014). This strengthening of the standard, coupled with extensive reports I heard from interviewees about fraud and corruption, casts skepticism across the apparent growth in the organic sector and raises questions as to whether the original organic standard did indeed comply with IFOAM principles. For example, the new standard requires crop rotations and cover cropping as well as access to outdoors for livestock, but these practices would have been assumed in any standard claiming IFOAM equivalence. Now however, China's most recent standard goes beyond requirements of most organic standards in requiring an inspection each time a new crop is planted, as opposed to annually. So to illustrate, for a vegetable farmer who likely has successive planting dates throughout the season, an inspection needs to be scheduled each time a new crop is planted. Interviewees widely criticized the new standard as being overly stringent and several certified organic producers said they would forego organic certification in the future and maintain green food certification instead, or only certify part of their production. Despite this more stringent standard, official reports assert that the numbers of organic operators have not diminished. There were an estimated 10,000 certificates issued in 2013; two-thirds for farms and one-third for processors (Wai, 2014).

There have been challenges associated with China's organic development. An EU China Trade project mission in 2008, noted the immature state of the organic regulatory framework, poor understanding of the regulation and processes, and corruption (Scoones, 2008). Other scholars have noted complex bureaucracy as a barrier to sector expansion (Wai, 2010). Yet, others have noted that in many ways the organic standards are a façade that hides a

policy ghetto, noting no incentives for transition to organic production, no price supports for organic products, no mechanisms for providing farmers legal redress against GMO contamination, and indeed the state does not even appear to be keeping statistics on organic production (Egelyng et al., 2013). These scholars argue that China's focus has been on placating consumers concerned with food safety and has neglected attention to policies that address more fundamental problems through polluter pay principles. For example, the state continues to subsidize synthetic fertilizers and pesticides, and generously fund and patent GMO crop developments (Carter, 2012).

5.2.7.5 The Role Played by Civil Society

Where a populist and democratic concern about agriculture and associated technology exists in the global north, a similar movement has been absent in China, where a state-controlled, elitist decision-making approach excludes people from the development of technology and science-driven standards (Xie et al., 2010). This state initiation has been called "authoritarian environmentalism" (Gilley, 2012, p. 287) in reference to a non-participatory and largely non-consultative approach to policy-making which excludes civil society and business actors, and emphasizes state-managed processes where only particular scientists and technocrats of the state's choosing are involved (Gilley, 2012). The approach eschews participation of either independent academia or civil society, and authoritatively proclaims scientific knowledge based on the participation by technocratic elites, deciding which 'science' to listen to and ignoring scholars with non-dominant views (Gilley, 2012). Writing about the development of climate change policy in particular, Gilley describes the lack of participation in environmental governance and standard-setting in China, noting that "As a general statement, all public policy processes in China are non-participatory" (2012, p. 293, emphasis in original). Further, where there is civil society involvement in policy and standard setting processes, it is tightly managed and participation is curtailed (Johnson, 2010).

The the lack of substantive input from farmers, coupled with a low level of ecological awareness and poor technical skills are holding back further development of the ecological and organic sector (Horlings & Marsden, 2014) and there is urgent need for 'bottom up' participation in strategy development as well as more effective agricultural instruction.

Small-scale farmers converting to organic agriculture require better production-related supports (Oelofse et al., 2011). Yet, part of the challenge is that even though food security is prioritized, many farmers have become despondent and lost enthusiasm for agriculture given its falling revenues, rising input costs, and the expanding opportunities they have for off farm work. Further, while farmers see environmental pollution as affecting their livelihoods, they generally believe the responsibility for solutions lies with the state and they can accomplish little acting autonomously (Ma, Chen, Zhao, Zheng & Lu, 2009).

5.2.7.6 Environmental Awareness and Food Eco-Labels

Recently however, awareness of environmental issues generally, and agro-food environmental issues specifically, is growing, particularly due to more transparency in the Chinese media and access to western media (Xie, 2009). For example, drawing on China Environmental Statistical Reports from 1995-2003, Xie shows how, in a sample of 10,000 households from 31 provinces and municipalities, 57% of respondents believed environmental problems in China are serious, with most acute concern centred on noise pollution, and air and water quality. Yet, scholars stop short of considering this an environmental movement similar to the experience of the global north and note that people's perceptions of environmental pollution are ambiguous (Tilt, 2013). Green activism in China is structured by a political environment in which authorities restrict efforts that involve mass organizing, control information flow, and limit channels of participation (Xie, 2009). Environmentalism is further restrained by the reality that, in rural areas, people understand that their livelihoods depend on being a polluter (Lora-Wainwright, 2009) and by a sense of fatalism that pollution is inevitable (Lora-Wainwright, Zhang, Wu & Van Rooij, 2012).

In terms of environmental awareness and food in particular, things seem bleak. Recently, Liu, Pieniak and Verbeke (2013), undertook a meta-review of 34 studies, published primarily in Chinese, relating to consumer attitudes toward green, hazard free and/or organic food in China. Most Chinese consumers are aware of these various eco-labels and associate them with safe food. The green food label had the highest consumer awareness, whereas people were least aware of the organic foods labels. Regardless of being aware of the labels, in most studies consumers were confused by these eco-food standards and were unable to explain the

differences between them. Further, Chinese consumer studies describe a pervasive distrust and suspicion about food quality and these labels, and consumers are skeptical about state enforcement systems. Consumers who purchase eco-labelled foods were doing so for personal benefits, or concerns about their own exposure and health, rather than environmental protection (Liu et al., 2013).

This section has outlined how ecological agriculture in China has been framed in an approach that celebrates the use of state-approved science and technology and is developing in a paradoxical place. On one hand, China has a strong history of traditional and often ecological practices, but, on the other hand, because farmers are not included in discussion and research, these skills are being lost. Meanwhile, China's prevailing productivism and food security policies has influenced what is considered ecological production. China's progressively stringent ecological standards and complicated governance illustrate this. While some scholars have considered hazard-free foods as 'ecological' (Lin et al., 2010; Paull, 2007), a closer look reveals that the allowable inputs in this standard are what, throughout the world, would be considered 'conventional' production. Finally, in this section I described people's low environmental awareness and the absence of any type of 'bottom up' involvement in the development of China's ecological agriculture sector. With this background, I now look at the ecological relations in China's AFNs with particular attention to the ways in which they define and manifest organic production approaches in this context.

5.3 Exploring the Meanings and Practices of 'Organic' in China's AFNs

Following the post-structural framing of this research, the ecological is understood as something that is not ontologically given. In other words, it is not something *out there* to be discovered. Rather I understand ecological as a relational concept that is negotiated within these AFNs in processes that are influenced by the Chinese political-economic and cultural contexts. Hence, the state, agricultural scientists as well as the consumers and producers comprising these AFNs all define what is ecological and organic, and develop institutions in response. This presents an assessment challenge.

Considering compliance with the Chinese organic standard as a definition of 'organic' for this research is problematic. While the Chinese organic standard as described above is comprised of a clearly codified measurable set of practices and 'rules' that could be assessed, AFN experience around the world suggests that smaller scaled producers often don't pursue certification because of cost, or because it is not seen as necessary for direct marketing. More importantly, the Chinese standard development was a state-led process that excluded the voices and experience of peasant farmers. Instead of taking the state definition of organic as my criteria, I have constructed a simplified assessment that considers the degree to which the production practices in these networks reflect a mutual interdependence of human and ecological systems. Using this tool, I look at the ways in which farming systems in these AFNs enhance biological diversity, demonstrate closed-loop systems and protect soil and water resources (Koohafkan, Altieri & Holt Gimenez, 2012; Luttikholt, 2007). Second, I complement this 'objective' assessment of farming practices by considering the ways in which producers and consumers in these networks are co-constructing the meaning of organic for themselves and how this lay definition responds to the state governance of organic. The key questions guiding this reading of the data are: to what degree do the production practices inherent in these networks reflect agricultural science consensus on functional integrity (as outlined below) and a mutual interdependence of human and ecological systems? And how do lay participants in these networks conceptualize and negotiate the meaning and practice of organic?

Numerous frameworks for documenting and assessing agro-ecological approaches exist. These frameworks consider the production methods on ecological farms as 'alternative' because they reject the dominant, productivist emphasis on yields and resource sufficiency. They focus instead on the functional integrity or stability of the agricultural system and its impacts on natural capital such as soil, water, crops and livestock, as well as on the ecosystem services from non-cultivated landscapes such as insectaries for pollinators (Luttikholt, 2007). As Halberg (2012) notes, a functional integrity approach has strong kinship with ecological production perspectives that underlie social science explorations of food systems. Specifically, the functional integrity approach aligns with principles of organic agriculture, principles of agro-ecology, as well as with discourse on traditional farming systems and ethics of care for

land (Luttikholt, 2007). It also aligns with the IFOAM organic principles and thus with the Chinese organic standard (Halberg & Muller, 2013).

The dimensions of functional integrity and associated indicators are listed in Table 6.

These indicators were selected based on three criteria:

- They hold importance in the literature and are frequently cited.
- They are culturally-relevant and meaningful in Chinese traditional farming discourse.
- They are non-technical in nature and amenable to farmer self-reporting and site observations characteristic of social science research.

Table 6: Indicators of Functional Integrity Selected for Investigation

Dimensions of Functional Integrity	Selected Indicators	
Protecting soil structure, fertility and biology	 Cover/Plow down crops/soil cover Compost and/or manure Use of ferments Mixed Cropping – Integrates Livestock 	
Using Close Loop Systems & Recycling nutrients at the farm or regional level ('Circular Farming' in Chinese traditional farming)	 On-farm composting On-farm manure Use of ferments Feed grown on the farm Mixed cropping – integrates livestock 	
Landscape, species & genetic diversity	 Use of untreated seeds, seed saving Biological pest management Use of ferments Include land for ecosystem management set aside 	
Protect and Conserve Water	Cover/plow down cropsAdapted varietiesRain collection	

Source: Compiled by author based on Halberg (2012), Koohafkan et al., (2012)

5.3.1 Ecological with Productivist Pressures

Table 7 summarizes the results from surveys from the CSA farms in this study. As illustrated, most practices on these farms appear largely consistent with the IFOAM organic principles and the Chinese organic standard including the practices of sourcing non-GMO seed, using on-farm composting and manure, mixed cropping and avoidance of synthetic pesticides and fertilizers. However, the use of cover crops and intercropping, two practices considered strongly ecological and essential to organic systems, seem to be lacking in these networks. The absence of practices to protect soil resources stands out as problematic and illustrates a logic of intensification that contrasts with other traditional practices observed. Intercropping is a traditional practice in China where two or more crops are grown on the same field in order to more efficiently use land, water and nutrients nutrients, as well as lower weed and pest pressure. While Chinese traditional agriculture has a strong reputation for intercropping and using cover crops (King, 1911), more recently agronomists have been finding the practice to be declining, especially in peri-urban areas where other farm income possibilities are expanding (Oelofse et al., 2011). The CSA operators I interviewed felt the practices of cover cropping and intercropping are very labour demanding, and they would need to spend more time in the field in order to manage the increased complexity of these cropping systems (FCSAB4, FCSAB5, FCSAB3). Further, several CSA operators said they lack equipment such as tractors necessary for these practices and the traditional knowledge of using work animals with plows has been lost (CSAB4, CSAB3).

This pragmatism echoes other research on ecological agriculture in China. A cross country case study involving China and Brazil also found Chinese cropping systems to be strongly influenced by market pressures, and thus falling short of organic principles established by IFOAM (Oelofse et al., 2011). Global north scholars have considered such examples as a weakening of organic practices and an unravelling of the organic movement philosophy by pragmatists responding to market pressures. In China's AFNs, this pressure to produce is not only economic. While the dominant practices in these networks are strongly ecological, the absence of some key practices suggests that the productivist ideology of the state permeates the largely traditional practices in these networks. As one farmer noted when I asked about the absence of cover crops, "On a small farm, it is just inefficient to grow a crop that you don't

sell. Plus I think most of these farmers know that we have a lot of people to feed in China. It is our responsibility to produce as much as we can. We don't have room for crops we don't eat" (FCSAB3).

Table 7: Functional Integrity Practices on China's AFN Farms

Outcomes	Indicators	Percentage of farms (N=14)
Protect Soil structure	Cover/Plow down crops/soil cover	38%
and biology	Compost and/or manure	100%
	Use of fermentation	77%
	Mixed Cropping – Integrates Livestock	70%
"Circular Farming"	On-farm composting	92%
Closed Loop Systems	On-farm manure	85%
	Use of ferments	77%
	Feed grown on the farm	56%
	Mixed cropping – integrates livestock	70%
Promote landscape,	Use of untreated seeds, seed saving	100%
species and genetic	Biological pest management	92%
diversity	Use of fermentation	77%
Protect and Conserve	Cover/plow down crops	38%
water	Varieties adapted to drought	Not observed
	Rain collection	Not observed

Source: this author

5.3.2 Searching for Traditional Knowledge

It is instructive to return to King (1911) and examine the adoption of traditional practices in these networks. Site visits and interviews I conducted, demonstrate the use of closed loop farming systems, which operators referred to as "circular farming" (FCSAB5, FCSAB4, FCSAJ2). Embracing closed loop systems is an illustration of ties to traditional Chinese practices (Li et al., 2011) and stand in contrast to industrialized farming systems which tend to specialize and increase the use of off-farm inputs Prior to China's industrialization of agriculture, these were the dominant practices of the peasant farming system as described by King (1911). A number of these circular farming techniques were evident on the CSA farms in this study. For example, almost all the farms I visited were

aerobically fermenting vegetable waste, and using composted human manure for fertility. In addition, typically farms were integrating livestock into their farming systems and relying on plant-based medicines made on the farm to treat the animals.

Yet the low input, traditional practices on these farms co-exist with advanced technologies. All the farms had extensive modern infrastructure, including modern greenhouse operations, paved roadways, concrete irrigation ditches, on-farm restaurants, farm stores and sometimes accommodations for visitors. In some cases, it is easy to understand the reasons for this mixture of traditional and modern. This infrastructure supports multifuncationality on these farms and a strong orientation toward tourism (discussed in the next chapter). Modern toilets that separate liquid and solid waste, make the traditional practice of separating 'night soil' from urine (somewhat) easier. Similarly, modern distilling equipment adds sophistication and precision to the processing of traditional medicines. These examples reflect a general philosophy that traditional practices can be re-articulated with modern practices and thereby improved.

However, other traditional farming practices, documented by King (1911) are notably absent on these farms. For example, CSA operators talked about challenges in sourcing non-GMO seed, but none of the CSA operators I interviewed talked about saving seed, and only one farmer was raising heritage breed animals. Clearly, seed saving and variety breeding are central to the re-establishment of traditional practices, so the absence of these practices is curious and problematic. Further, there were few traditional pest management approaches being used on these farms, even though several of the farmers told me that managing pests was their biggest challenge. But I saw none of the traditional practices that would help address their challenges. For example, there were no insectaries planted to draw in beneficial insects. Nor were there any symbiotic cropping patterns, like the use of frogs to control insects, as described by King (1911). Indeed, the cropping patterns I observed were rather unimaginative and pragmatic. Vegetables were conveniently planted in rows to facilitate harvest, and as noted above, intercropping was limited.

There are some possible explanations as to why some traditional practices are adopted and others are not. First, these are nascent farms and inexperienced urban farm operators. Some traditional practices, like the complex cropping systems and plant breeding, described by King (1911), might be, for the present, beyond the skill levels of these new farmers. Second, the state strongly influences the adoption of particular practices through its subsidies for certain technologies. In particular, in recent years, the state has recognized the potential of farm-based tourism for economic development and has supported its expansion (Su, 2011). This policy direction and associated funding could explain the extensive on-farm infrastructure seen on these CSAs and the adoption of related practices. However, with neither funding nor extension support, traditions such as seed saving or preserving heritage livestock breeds, are not being preserved in these networks.

5.3.3 Support from Within the Networks

This selective adoption of traditional practices illustrates that while China's 'new peasants' are environmentally motivated and seek to re-cover traditional practices, enacting these plans is challenging. Most of the CSAs in these networks were started by "self taught" (FMB1) urban residents without farming backgrounds in a context where traditional ecological practices have been lost. Interviewees lamented that "chemical farming is now seen as 'traditional' to peasants in China" (NGOB1). At one farm visit, the CSA operator noted in reference to a 65 year old peasant farmer who had come to join our conversation, "These traditional practices and heritage breeds were foreign to my head foreman when he came here and we had to learn together" and that he "wanted to leave the farm in the beginning because he was worried that he wouldn't get paid. He did not believe we would have a good yield without using chemicals" (FCSAB3). Chinese scholars have also noted the loss of traditional ecological practices is exasperated by the state's focus on technological solutions and the absence of state or other civil society supports (Li, Miao & Lang, 2011), a situation that these networks are trying to address by "learning from each other" (FCSAB4).

In the absence of civil society supports, these AFNs are filling this knowledge and skill void themselves. Notably, during my last visit one of the farmers' market organizers was using proceeds from market sales to subsidize CSA operators to attend an organic farming

workshop she had arranged with a Canadian organic consultant. As she explained, "There is nowhere else these farmers can get this help. The state does not help us and the universities do not have the resources. There is really only one NGO that would even consider this practical kind of training and they are in Hong Kong" (FMB1).

CSA operators in these networks are not facing these educational challenges alone. Organizers of the farmers' markets and buying clubs, as well as some CSA members, are strong supporters of organic practices, and on-line posts frequently defend and celebrate these practices. As a typical example, in response to a consumer question about how the products offered at the farmers' market are different from others, a consumer responded:

Fertilizer and pesticide residues in the 1.8 billion acres of farmland in China would make us regret that our later generation won't have clean water and healthy soil for safe food. Comparing to the pollution of industrial production and urbanization, agriculture is a bigger polluter in China. These farmers are doing something different and we should support them. (FCSAB4).

This post resulted in a rally of responses about the problem of synthetic fertilizer use in China, complaints that the "organic fertilizer industry in China should be more regulated" (FMB1), discussions about the difficulties in sourcing "clean" manure for fertilizer resulting in many farmers "keep[ing] animals just for their manure, even though the animals need a lot of land for grazing" (FS1).

Other examples further illustrate this co-construction or 'organic' between producers and consumers around ecological issues. A series of posts responded to a blogger who saw inconsistencies in the ecological practices on one of the farms and asked, "The original drive of developing organic farming is to protect environment, but now we see all these vegetables are packed in unrecyclable plastics bags, what you all think?" (FCSAB4). Responses from both producers and consumers offered alternatives to the use of plastic, such as packing vegetables in a kind of dried grass, and inviting others for further exchange and sharing of ideas to come up with better solutions. The series of ideas were then gathered together and re-posted as a list to all the farmers in the network to consider as possibilities for packaging CSA vegetables.

These AFNs have also developed a focus on food skill development for both producers and consumers. In response to widespread loss of traditional farming skills, some volunteers have undertaken the task of visiting peasant farms to explore their practices (FCSAB6) and to offer workshops on these practices to CSA operators and CSA members. Further, some of the better resourced CSAs in the networks host internships for students interested in learning organic farming techniques so they can return to their home villages and begin new organic farms and thereby reproduce the ecological resource base in the countryside (cf. Van der Ploeg, 2010). Indeed an entire stream in the 4th Annual CSA Conference I attended in Beijing was devoted to the theme of '*Young People Return Home to the Countryside*', which I was told was an emerging phenomenon that academics and NGOs are following with interest and hope (NGOHK).

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5.3.4 Embracing Traditional Practices but Marginalizing Peasants

While these AFNs are organizing strong networks and drawing support from consumers, NGOs and academics, it seems contradictory that they are not seeking advice in the most obvious place - the peasant farmers who are working on their farms. The CSA operators I interviewed believe that traditional agriculture in China has been lost, and that peasants no longer have traditional knowledge and skills. Yet, many of the farms I visited were employing peasants who looked to be over 50 years old, and would have been raised on collective farms of the Mao era and it seems unbelievable that the parents of these peasant farmers, who would have farmed with traditional methods, had such little influence. It seems unbelievable that farming traditions that persevered for forty centuries could be lost in one generation. This contradiction requires another explanation for why CSA operators are not identifying the opportunity to learn from the peasant farmers on their farms. I suggest these networks articulate a discourse of suzhi. Discussed further in the next chapter, suzhi is a discourse of quality that substitutes for the concept of social class. Suzhi discourse portrays peasants as low quality, linked to the uncivilized, uncultured and superstitious (Anagnost, 2008). It is revealed in a widespread distrust of the peasantry in China, and in the way CSA farmers describe the peasant labourers on the farms. Comments such as, "peasants no longer know how to farm traditionally" (FCSAB5), "We needed to show them [the peasant workers] how to farm"

(FCSAB4) and "It is difficult to find a peasant who knows anything about organic farming" (FCSAB3) suggest that two solitudes of urban and rural prevail in these 'alternatives'. Hence, while the appeal of traditional agriculture drives the desire for strong ecological practices in these networks, this gaze toward the peasant, judgements about their motives and backwardness, and their exclusion from decision-making on the farm, ignore what could be the best source of knowledge and skills on traditional farming available to China's 'new peasants'.

5.3.5 Resistance to the State's Organic Standard

It wasn't possible for me to completely assess farm compliance with the state's organic standard, and under a quarter (24%)²⁵ of the farms I visited had chosen to have their processes verified by a third party. I suspect that most of the CSAs I visited were compliant with China's organic standard in terms of farming practices, but likely they were not keeping the required audit trails for inputs, harvest and storage. Nor were most of them testing soil, water and/or produce for heavy metals or other residues as is required by the state standard. Further, there was a reliance on enclosed systems for pigs, as noted below, that would not meet the requirements for outdoor access in the organic standard, and it is doubtful that the use of human manure would meet the standards.

Instead of supporting the national standard, most of the CSA operators I spoke with were cynical about the state's role in organic standard setting and speculated that its development was not motivated by ecological concern. They thought the whole group of ecological standards (described above) were a façade to give the "appearance of addressing food safety concerns" in order to maintain "social harmony" (FCSAJ2). There was also widespread distrust of the certification and enforcement process with AFN participants feeling that the state "doesn't monitor the sector effectively and hasn't done an effective job at promoting the organic concept" (BCB1), and that there is little hope of civil society shaping these standards or audit arrangements in the future. Further, CSA operators explained that the standard was not achievable for small producers, especially with the most recent changes

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²⁵ This compares with the situation in Ontario, where 28% of CSA farms are certified (Schumilas, 2011).

(outlined earlier). One farmer explained that it would cost the equivalent of US \$145²⁶ for an inspector to visit and oversee their work, *each time* they put new seeds in the ground. For CSA farmers who sow seeds continuously throughout the season, this cost becomes prohibitive. However, the rejection of the state's organic standard goes beyond economic concerns to reflect an ecological ideology inherent in these AFNs. As one CSA operator noted, "*It is not just because it is expensive. The organic standard is for farmers who are using organic pesticides and inputs as substitutes. We are farmers that are trying to shift from that philosophy to traditional methods and these are not addressed by the standard. Our traditional pig system for example does not meet the standard because the pigs do not have open access to outside" (FCSAB4).*

Reacting to these concerns and exclusion from standard setting processes, producers and consumers in these networks are contesting and reconfiguring state standards by constructing their own meaning of organic (BCBI, FMBI). Rejecting the state's expert-led third party verification system, their approach relies on the development of lay knowledge. Both farmers' markets and buying clubs in these networks have developed practices they consider fundamental to organic production along with regimes for verifying these practices. As one of the farmers' market volunteers described:

We met with farmers and went to the farms with scholars from the university to discuss their practices, because I didn't understand about organic practices. In the end we now use a set of criteria for who we accept to sell at the markets. For example: no pesticides and chemical fertilizers, avoid GMO (but we know sometimes farmers can't tell), animals cannot be kept in cages, no antibiotics unless the animal is very sick. Farmers must be willing to work with others, and they have to be small or medium size, and for processed foods there are no chemical additives, and they are made in a traditional way" (FMB1).

The market then uses these criteria to assess farms. In 2012, there were over 300 applicant farms to the market in Beijing. One third of these were refused vendor status based on the

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²⁶I received widely ranging estimates on certification costs. Some estimates were as high as US \$2,200 per crop. The divergence in estimates suggests to me that some CSA farmers dismissed the idea of certification before investigating the details.

practices the farmer described. The remaining 200 farms were visited by market volunteers and only one third of those were considered "qualified" (FMB1).

These criteria are not well defined and codified as in a national organic standard. Instead they convey the general interest of market organizers in supporting a shift toward a less industrialized and safer food system. Plus, unlike the situation in national organic standards, there is flexibility. While, on one hand market volunteers stressed their commitment to screening prospective vendors, at the same time they emphasized that this is the responsibility of consumers in noting, "We are only a platform for producers to connect with consumers. It is up to them to communicate about the products. For example, we have accepted products from farms that use limited pesticides as long as it is declared and transparent when the product is in the market" (FMB1).

In parallel fashion buying club volunteers ensure the quality of their sourced food by visiting and interrogating suppliers directly. They highlight the time and organization it takes to regularly visit multiple farms. They are committed to rigor and they work with agricultural researchers from the university to design forms that translate the technical aspects of organic production into lay language with various indicators, which they use to inspect farms (BCB1). They are committed to transparency. They post the criteria and the results of their farm visits on their website. They describe their process as an "ethical inspection" in which the farmers make pledges as to their practices (BCB1). One of the buying club organizers I spoke with was particularly critical of the state's approach to standard-setting and enforcement, and adopted a stance I would define as activist. She was passionate about needing to feed her children healthy food and disgusted by the state's unwillingness and inability to ensure food quality. She described the state's ecological standards and governance as a "flawed concept" which deceived the public, media, officials and experts. She said that they have visited farms that had been verified as organic and found pesticides and synthetic fertilizers in plain sight, and "farmers did not even try to hide them" (BCB1).

This process of community based standard development reflects a civic approach wherein expertise is not limited to experts with credentials, but rather is a shared responsibility

inclusive of lay perspectives. In this way, the Chinese case is similar to processes used in Japan by Seikatsu Club Consumer Cooperatives and their Independent Audit by Many described earlier (Kimura, 2010). There is also discussion among China's AFN participants about PGS, although, this term was used quite indiscriminately. For example, in contrast to the rather structured approach taken by IFOAM, where criteria to use in assessing farms are carefully constructed, on my first visit CSA operators used the term PGS to refer to the situation where individual consumers come to the farm to visit and to observe practices for themselves (FCSAB4). However, I have learned not to underestimate how quickly things can change in these networks. By my second visit (7 months later) the "National Ecological Agriculture Network" had been launched by a group of CSAs with the support of Asia's IFOAM representative (OB1). In May 2013, I noticed in an IFOAM newsletter and on one of the CSAs websites (FCSAB6), that the IFOAM PGS Coordinator had visited with a group of CSAs I had interviewed, and that the farms had identified what was needed to pursue a formal PGS system and were actively working towards that goal.

Some global north scholars have suggested that this type of participatory standard setting process is characteristic of advanced neoliberalism where states are aligning with industry and devolving their responsibilities to communities (Guthman, 2008). The evidence from the Chinese AFNs considered here complicates this reasoning. The participatory producer-consumer co-constructions of standards in China's AFNs do not result from a 'weak state' acting in concert with agri-business to 'water down' standards. Rather, the evidence suggests the opposite. In China, the state has acted to address widespread corruption and fraud in organic governance by enacting strong standards, in effect setting the bar ridiculously high with requirements for an inspection every time a seed is planted, knowing that farmers can't possibly comply. Citing examples of corruption, participants in the AFNs I interviewed distrust the state's standard setting mechanism and the bureaucracy charged with its enforcement. In what can be understood as a form of everyday resistance to the state's approach, this distrust is motivating the formation of nascent civil society action to develop standards in which they can place their trust. As with the IAM, producers and consumers are involved in this civic standard setting together, and are jointly responsible for selecting the aspects of quality they seek. As a result, the focus of the criteria is on organic farming practices rather than market quality

criteria like size, appearance or consistency. Plus, these AFN processes are situated and reflexive versus universal and inflexible, allowing for exceptions in particular situations. So while it could be argued that such civic processes in effect 'let the state off the hook' by accepting its responsibilities (Guthman, 2008), it can also be argued that in this process, people are developing skills that could be prefiguring future democratic processes.

5.4 Ecological Hybrids of Traditional and Modern Production

This chapter has explored the ecological relations in China's AFNs with particular attention to the ways in which they define and manifest organic production approaches in the context of state-led, technologically-driven productivist approaches to ecological agriculture governance. I argue that the farms in these networks articulate a mixture of traditional and modern production methods in a type of ecological hybridity. I began by considering the divided ways in which organic is understood in both scholarship and practice, as a set of codified practices and as diverse ecological processes. From there, I discussed how in the global north the organic movement came to rely on the former approaches, resulting in standards becoming co-opted and watered down in response to corporate pursuit of profits. In response, a 'beyond organic' movement is rekindling the original ideology of the organic movement and there is growing interest in civic-led standards construction that centres lay voices in open, democratic process.

However, the situation in China sits in contrast to this civil society mobilization that characterizes AFNs in the global north. In the absence of any type of ecological social movement, and driven by historic scientism and celebration of technology, the state has sponsored the development of a 'made in China' ecological agriculture sector. But this Chinese ecological agriculture is in trouble. Its research base is limited, the traditional practices it seeks to adopt are evaporating, and scholars have no room to manoeuvre from within an ideology of productivism that finds traditional subsistence oriented farming lacks the yields to meet the state's food security targets. In efforts to built stronger import and export markets for high quality foods, the state has built a complex set of standards, which are largely devoid of other policy supports.

Turning to China's emerging AFNs, I used two different lenses to explore how they understand and construct organic food in this context of authoritative standard governance and productivism. First, using the concept of functional integrity, I described how the farms in these networks are strong examples of organic practices with a focus on biodiversity, closed loop systems and de-emphasis of externally sourced inputs. However, the state's reach and drive for productivism extends to these 'alternatives' and CSA operators and farmers eschew key ecological practices because they would negatively impact yields. In the absence of organized civil society or government support, these producers, many of whom are new to farming, are challenged in a context where traditional practices are being lost. In response, farmers and consumers are supporting each other in these networks to build food skills and celebrate both traditional and modern ecological practices. However, my observations raise questions about why some traditional practices are pursued and others are not, and why, in their search to re-kindle traditional agriculture, these urban CSA farmers are not looking to the peasants who are labouring on their farms.

Finally, I described how, in the face of widespread distrust of and exclusion from the state regulatory system for organic, these face-to-face interactions have spawned new approaches to defining organic and verifying production practices. In resistance to state authorized standards, consumers and producers in these AFNs are co-constructing what organic means and building skills and establishing trust in the process. In this way, paradoxically, the state's focus on food sufficiency and productivism, and food quality through the setting of artificially high standards, results in the formation of nascent civil society that is resisting the dominant paradigm by constructing its own understanding and practice of organic from below.

The next chapter looks more closely at *how* the process of connecting and trust building between producers and consumers in these networks is occurring and explores the nature of these interpersonal relations using an 'ethics of care' theoretical approach.

6.0 China's AFNs as Windows to Trust and Reconnections

The economic and ecological aspects of China's reforms, and how those are implicating the formation of AFNs, were considered in Chapters 4 and 5 respectively. This chapter complicates the analysis by taking a closer look at the interpersonal dimension of reforms and the emerging AFNs framed within cultural changes. The de-collectivization processes described in Chapter 4, and the agricultural modernization described in Chapter 5, combined with urban reforms such as privatization of housing, and marketization of education and medical care are all encouraging individuals to assume greater responsibility and engage with the competitive forces of the market, and thus assume more risks (Yan, 2011). These sweeping social and economic changes are not all negative. They have resulted in food abundance and diverse food choices that have replaced historical experiences with hunger and famine (Veek et al., 2010) detailed in the last chapter. Yet, anthropologists in China describe a changing and contradictory cultural landscape where growing individualism and profit motives mingle with strong expectations that the state is responsible for ensuring food safety and security, recalling once again, the story of the Mandate of Heaven.

I frame this look at the interpersonal relations in China's AFNs within China's food safety 'crisis', which I argue is a central part of the backdrop to the emergence of AFNs. I outline how the food crisis has become "socially lethal" (Yan, 2012, p. 717), how food fears are conflated with broader quality fears about the industrializing food supply, and are promoting attempts to re-build trust in food. Of course, this story resonates with the global north experience, and I review the ways in which AFNs can be examples of re-embedding and re-establishing relations of trust. Here I focus on the ethics of care literature as applied to food networks and use this to develop an interpersonal lens through which I consider China's AFNs.

To forecast some conclusions, I argue that given the high level of social anxiety about food in the current context, people are coming to China's emerging AFNs to avoid unsafe food and mistrust of the food supply, versus being drawn toward trust. In engaging in these networks, most consumers are motivated by 'caring for themselves' and their immediate families. Yet regardless of what brings people to these networks initially, for some, there is a

deepening of interpersonal relations and development of trust that mirrors research from the global north. I argue that AFNs function as a 'window' through which distrusting and self-interested consumers can enter and encounter a different ethic, that for some, deepens their interpersonal connections and conflates identities of 'producer' and 'consumer'. But these networks are caught in a space where cultural conditions shape them in contradictory ways. On one hand, *suzhi*, a discourse on quality that stands in for social class works in opposition to the egalitarianism of traditional Chinese ethics and exemplifies the individualization and weakening of social bonds in the reform period. On the other, the ancient practice of *guanxi* helps to build informal trust networks that work to grow China's AFNs as well as motivate the formation of nascent civil society.

6.1 The Appearance, Disappearance and Re-Appearance of Confucius

In 2012, a large statue of Confucius rather abruptly appeared in Tiananmen Square, and after a brief time, it was moved to the national museum. The statue's abrupt appearance, disappearance and reappearance has provoked significant discussion among cultural scholars in China (cf. Wan, 2013), with some suggesting this as a metaphor for China's struggle to integrate its traditional cultural views with those of western-influenced modernity. I do not engage at length with the cosmology guiding China's traditional cultural norms and beliefs, nor do I seek to essentialize culture as an influence on China's AFNs. Yet to write about the appearance of AFNs in China without, at least briefly, engaging with selected aspects of Chinese traditional culture, would leave the phenomenon under-explored. Chinese cultural heritage is founded on diverse schools of thought including Confucianism, Buddhism, Taoism, all of which shape cultural practices in contemporary society, and need to be considered as context for examining AFNs, in the same way that political economic and environmental conditions have been considered thus far in my analysis.

In reflecting on the appearance, disappearance and re-appearance of Confucius described above, Wan Junren (2013), a Chinese ethicist and philosopher, argues that "the moral problem of contemporary Chinese society reflects the moral anomie and lack of norms in modern Chinese society's process of transformation" (p. 185). He joins with others (Kleinman et al., 2011; Yan, 2010) in detailing how traditional moral culture in China has almost lost its

effect, but society has not yet established a new moral order. Beginning with the 'New Culture Movement' in 1910, and its slogan, "'Down with Confucianism'" (Wan, 2013, p. 186), old ethics were cast aside in a disillusionment with traditional culture as ancient values came to be seen as a historical burden that was impeding China's entry into the modern era. China's experience with modernization is putting enlightenment values of liberty, individualism and equality at odds with traditional Confucian ethical concepts of benevolence (ren), righteousness (yi), propriety (lie), wisdom (zhi), and fidelity (xin) (Wan, 2013)

Moral traditions, however, are not easily broken. The Chinese version of modernity may still be in development and traditions can be a "spiritual driver for social change and transformation" in these troubled times (Wan, 2013, p. 197). As with the reappearance of the Confucius statue in a different place, Chinese society needs to find a way forward that integrates its moral traditions with those of Western liberal society. However, the journey Wan notes, will be marked by discontinuities and apparent contradictions between traditional and liberal worlds. An example of these contradictions can be found in the simultaneous rise of individualism and the perpetuation of *guanxi* network relations, and their contradictory influences on China's AFNs.

6.1.1 Rise of Individualism and Weakening of Social Bonds

Individualism is a social theory and ideology to do with the self-realisation and voluntary choices manifest to various degrees in different societies (Wan, 2013). It is typically associated with liberalism and competitive capitalist relations where people are influenced to see themselves born as equals, and as autonomous almost asocial beings, characterized by relatively weak traditions and weak social bonds between people. Scholars argue that, to various degrees, increasing individualization has been manifest in China's reform period (Yan, 2011). Under Maoist socialism, the traditionally central institution of the family was replaced by the party-state through enforced participation in public political, economic and social campaigns. Chinese society shifted to "highly developed collectivist society where the individual almost entirely had lost her/his freedom and autonomy" as individual identity became tied to the state with the great goal of building a "strong and modern China" (Yan, 2010, p. 493). But this has shifted during reforms and the the Chinese term *songbang*, or 'to

untie' has been used to describe recent changes (Yan, 2010). Reforms such as decollectivization of farms, farmers and urban work units, can be understood as the untying or freeing individuals from the constraints of collectives. Other major reform projects such as privatization of housing and marketization of education and medical care have all forced the individual to take on greater responsibility, engage with competitive forces of the market, and assume more risks (Yan, 2011). In this way, the complex pressures of privatization, urbanization, and the rise of consumerism are all encouraging a shift to a more individualist society.

However, unlike throughout much of the global north, in China the persistence of state control means that this untying is only partial and the individual's rights and identity remain dependent on the state (Yan, 2010). For example, a growing consumer protection movement, illustrates that, what on the surface appears as a growing assertion of rights²⁷, has indeed been developed within government structure where the state retains absolute authority and control, suggesting that processes of 'untying' and 'retying' are occurring simultaneously (Kleinman et al., 2011; Yan, 2010).

An interesting example of the way in which state control of the individual is perpetuated, notwithstanding the individualizing forces of the market, is given by the way in which high schools hold 'pep rallies' to indoctrinate young people (Hansen & Svarverud, 2013). Hansen and Syarverud provide an interesting glimpse into how schools simultaneously promote an ideology of the self-made individual, capable of creating economic value through individualism, but at the same time, promote a type of individualism that sees people as subordinate to the state. This is a fundamental contradiction in China. The single party state requires complete loyalty, but simultaneously promotes liberal economics that depend on individual self-reliance and entrepreneurship (Hansen & Syarverud, 2010).

6.1.2 Discourse of Suzhi

A further illustration of the tension between traditional and liberal values in contemporary China is the discourse about population quality or *suzhi* (Anagnost, 2004;

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²⁷ The Chinese view of rights and civil society-state relations are discussed at length in the next chapter.

Sigley, 2009) introduced in the previous chapter. With over thirty different definitions in English, *suzhi* defies simple translation as its meanings can be very contextual (Kipnis, 2006). Whereas during the Mao-era, the peasantry was cast as revolutionary, in reform-era China, educated urban elites have enacted this discourse in portraying peasants as backward and obstacles to modernization (Anagnost, 2004). In the 1980s, suzhi became the dominant word for 'quality', with a meaning that reflects the shifting power dynamics evolving with growing individualism and capitalism (Jacka, 2013). Suzhi is used to explain differential value of labour, and by extension, the differential value of people. As such, it is a signifier that stands in for the concept of 'class' in Chinese discourse (Anagnost, 2004). In essence suzhi discourse divides behaviour into civilized (mostly associated with the urban) and uncivilised (mostly associated with the rural). Anagnost (2008) describes, "the discourse of *suzhi*, appears most elaborated in relation to two figures: the body of the rural migrant, which exemplifies *suzhi* in its apparent absence, and the body of the urban, middle-class only child, which is fetishized as a site for the accumulation of the very dimensions of suzhi wanting in its 'other" (p. 195). As such, it stands in opposition to the egalitarianism that characterizes traditional Chinese ethics (Jacka, 2009). In this way, the discourse has become an important tool in responsibilizing citizens toward a productive market society in the reform period, and in diverting gaze away from the state's failure in addressing growing economic inequities (Kipnis, 2006; Jacka, 2013). In summary, the discourse of *suzhi* exemplifies the individualization and weakening of social bonds in contemporary China. Yet multi-directional shifts are underway. This un-tying coexists with re-tying and strengthening of informal networks illustrated by the practice of guanxi.

6.1.3 The Practice of Guanxi

While *suzhi* discourse strongly illustrates the growing individualism in contemporary China, *guanxi* relations illustrate the persistence of traditional ethics. Drawn from Confucian ethics valuing informal rules, versus liberal traditions favouring laws and legal institutions, *guanxi*, has been seen as the Chinese version of social capital (Kipnis, 2006). In essence, *guanxi* is understood as an informal system of social connections that are cultivated through the ongoing exchange of gifts and favours, and deeply rooted in Chinese culture (Gold, Guthrie & Wank, 2002). The practice of *guanxi* is seen as having multiple dimensions. First *guanxi*

relations are dyadic. Social bonds are made between two parties, and sets of these dyadic relations form networks, in which a person can use someone else's *guanxi* ties to their advantage (Keith, Lash, Arnoldi & Rooker, 2014). These bonds are characterized by mutual commitment, loyalty and obligation (Keith et al., 2014). If the quality of *guanxi* is high, the relationship is also characterized by a deep trust and feelings between the parties. This is cultivated by repeated interaction, reciprocity, and long-term equity (Chen & Chen, 2004). On the other hand, *guanxi* can also be unequal and there can be a strong element of patronage or clientelism to its informal networks (Keith et al., 2014), giving it simultaneously positive and negative connotations.

Guanxi is linked to sentiment and feelings (Gold et al., 2002). For this reason guanxi is not easily acquired, and people speak of 'cultivating guanxi' as a long term practice. Indeed this feelings or sentiment component differentiates quanxi from social capital, which is typically understood in the global north as more instrumental (Keith et al., 2014). This is not to say that guanxi relations do not serve instrumental needs, indeed they do. But guanxi relations are about both "things and feelings" (Chen & Chen, 2004, p. 309). Guanxi is best understood as a resource for social networks, that can help facilitate trust and reduce uncertainty, especially in situations where formalized institutions are lacking (Keith et al., 2014).

As with the shifting locations of the statue of Confucius, on one hand we see the pull of individualist forces as demonstrated through *suzhi* discourse, and on the other hand, strengthening social bonds through informal *guanxi* networks. This tension is evidenced in China's food safety 'crisis', which as the analysis below shows, provides an important backdrop to the exploration of China's AFNs.

6.2 Unpacking China's Food Safety Crisis

The social and cultural untying processes evident in contemporary China, and the reliance on informal networks over formal institutions, has dramatically affected food relations. Growing anxiety, fear and worry about the safety of food can be viewed against the backdrop of this evolving moral landscape of growing individualism and profit motives, yet strong expectations as to the state's responsibility for food safety and security (Keith et al., 2014; Jia & Jukes, 2013). China's food safety scandals started to receive exponential attention, by

scholars and the global press, in 2008 when 40,000 infants had to be hospitalized because of deliberate contamination of milk powder with melamine (Yan, 2012). Since that time, scholars have begun to unpack the ways China's continuing food safety scandals reveal deep social and political processes deserving of the term 'food safety crisis' (Cheng, 2012; Yan, 2012). Yan (2012) has proposed a typology to help understand the various incidents that comprise the 'crisis'. He notes that incidents can be divided into three semi-distinct types. First, food hygiene problems, common in pre-modern China, have continued despite a more industrialized food system. Second, Yan (2012) describes a category of "unsafe foods" which are generally incidents associated with the extensive use of fertilizers and pesticides in China's industrialized food sector (p. 707). Significant numbers of incidents fall into this category. Reports suggest that nearly 50% of fruits and vegetables in China have pesticide residues exceeding official standards and that each year more than 100,000 people become sick due to pesticide exposure (Holdaway, 2013; Yang, 2007). Third, Yan (2012) characterizes some food safety problems as "poisonous foods" and the types of scandals most provocative of the food safety crisis (p. 710).

Poisonous foods are a newer phenomenon in China, and can be differentiated from other types of food problems because they are associated with deliberate contamination and thus serious ethical concerns (Yan, 2012). There are multiple pathways through which food has been deliberately contaminated by processors and producers motivated by profit. Specific harmful inputs have masked cheap processes, as in the case of colouring vegetables and berries with dye to improve their appearance. Cooking oil has been re-claimed and adulterated. Dye has been fed to poultry so eggs will be more brightly coloured. And, in one of the highest profile cases, melamine has been added to milk to boost its protein content cheaply (Yan, 2012). Yan (2012) also describes a category of "fake foods" which present a "a challenge to the imagination" (p. 712). Examples are staggering and nauseating, and include starch masquerading as milk powder, soy sauce made from human hair, as well as chicken eggs made of water and various chemicals. These cases of deliberate food adulteration in the pursuit of profit are most disturbing because evidence suggests they, all too frequently, occur with the knowledge of government officials (Yan, 2012, Holdaway, 2014). Hence, while research suggests the incidence of ill health from the deliberate adulteration of food may indeed be lower than from food hygiene problems, these "fake food" examples are "socially lethal" (Yan, 2012, p. 717) because of the intention to do harm with the apparent knowledge of the state, and because of the widespread fear, panic and distrust they engender.

There is widespread agreement among scholars that a generalized distrust around food exists in Chinese society and state efforts thus far have failed to re-build trust in food. Indeed my interviews confirm this. Every individual I spoke with initiated a conversation about China's food safety crisis, even though I never prompted this with a question. Despite harsh penalties for the guilty, and new food safety legislation and enforcement systems, the problem continues because of bureaucratic fragmentation, competition among regulatory agencies and corruption of officials (Jia & Jukes, 2013). Canadian sociologist Hongming Cheng (2012), who has investigated white collar crime in China, has recently turned his attention to "food crime" (p. 254). He argues that food scandals are perpetuated by the existence of a "helix of industrygovernment-university relations" that favours "cheap capitalism" (Cheng, 2012, p. 257). The government's own surveys consistently show food safety as a top concern revealing that by the end of 2010, 18 months after the state passed strengthened food safety legislation, 70% of surveyed consumers still ranked food safety as a top concern (Yan, 2012). In an unprecedented move, the party-state acknowledged its inability to provide safe food to its people. Yan (2012) cites a 2008 Ministry of Commerce report that admits "the increase in public concern about food safety may be an indicator of the decline of consumer confidence in the government's ability to regulate food safety" (p. 724). Indeed, the state officials also don't trust the food supply. The previous Mao era practice of a "special supply" of food designated for government officials and intellectual elite that existed when food shortages were part of life, has reappeared in response to the food safety crisis (Yan, 2012, p. 723). It seems that no resolution to the problems is in sight.

Given the tendency toward *suzhi* discourse described above, blame for China's food safety crisis is frequently cast toward peasants and away from the state's regulatory failure (Ross, 2012). In analyzing milk adulteration scandals in 2010 and 2011, Ross (2012) raises the question of why farmers are blamed for contamination instead of state regulators and industries whose contaminated water is used on fields. Indeed, the majority view is that China's food safety problem is a crisis associated with a food system that is chaotic and

fragmented, and dominated by multiple small handlers (Holdaway & Husain, 2014). Critical analysis however reveals that consolidated food chains are not exempt from problems. The large 2008 melamine incident was not caused by the actions of small farmers, but comparatively large and powerful firms (Holdaway & Husain, 2014).

6.2.1 Reconnections to Restore Trust in Food

Jacob Klein (2013) is one of the few scholars in China studying how people are responding on a day-to-day basis in this pervasive climate of food distrust. His work suggests that these concerns about food safety are conflated with broader quality concerns and fears associated with the modern food system and industrialized production methods described as "unnatural" or "polluted" (p. 384). He argues that while, on one hand the disconnections, emphasis on individual responsibility, and market competitiveness of the reform period result in growing food uncertainties, at the same time these changes encourage people to pursue new connections in attempts to re-build trust in food (Klein, 2009, 2013). He describes, for example, his work with the Sino-Agriculture group in Kumming. Sino-Agriculture is part of a large alternative food company with a far-reaching ethical agenda. By 2009 they had established an organic vegetarian centre in Kumming that included a restaurant, food store, cafe and educational programs. Drawing on Buddhist notions of compassion and virtue, their activities focus on connecting producers with consumers and promoting ecological food systems (Klein, 2009).

Klein's anthropological research suggests that people's values can be influenced by these 'alternative' food programs and that consumers are seeking ties with specific vendors at markets and other programs, to reconnect with producers and develop trust-based relationships around food (Klein, 2009). He notes that trust in food is entangled with people's understanding of place and seasonal cycles, regional cuisine as well as perceptions of the food vendor or provider. Further, in the process of rebuilding trust, state endorsement of processes through the existence of certification schemes was found to be irrelevant, a finding echoed by nascent CSA research in China (Klein, 2013), as well as by this research.

In the face of ineffective food governance, China's food safety crisis has perpetuated a crisis of distrust of the market, of individuals and of the state. This 'food safety crisis' sits in a context where people have been untied from collectivist institutions during the reform period, but still look to the state, although perhaps more tentatively, for ensuring food security and safety. Yet preliminary research suggests that the same processes that are contributing to the 'food crisis' might be stimulating diverse solutions by encouraging new connections to rebuild trust, not in the state's ability to provide safe food, but rather in place-based face to face relationships. Indeed agro-food scholars argue such a situated 'reconnection' has been occurring in the global north.

6.3 Reconnecting to Food in the Global North

As discussed above, scholarship that interrogates the ideas and practices of untying (disconnecting) and retying (reconnecting) to food is only just beginning in China. In contrast, in the global north these concepts have been foundational to AFN scholarship for over two decades. The tangible and intangible qualities of connections between and among producers, consumers and food production through local, direct exchange (as in for example CSAs, buying clubs, farm shops, farmers' markets) have been extensively explored and contested (Cox et al., 2008; Feagan & Morris, 2009; Feagan & Henderson, 2009; Hendrickson & Heffernan, 2002; Hinrichs, 2000; Kneafsey et al., 2008). AFN scholars most frequently draw on theories of embeddedness in discussing these connections and reconnections (Granovetter, 1985; Polanyi, 1944). More recently, however, and in response to some of the critiques of embeddedness as an analytic, the feminist theory of 'ethics of care' (Tronto, 1993) has offered another tool (and indeed the lens used in this analysis) to unpack relations in food systems. In this section, I briefly highlight the ways in which AFN scholars have drawn on embeddedness theory and the resulting critiques. Then I introduce how ethics of care theory has emerged with AFN scholarship and describe its application to AFNs before using it as my analytic approach to interrogate the interpersonal relations in China's AFNs.

6.3.1 Embeddedness as a Lens on Reconnections

Scholarship on connection and reconnection in AFN most frequently draws on theorizing of Polyani (1944) and later Granovetter (1985), who both argued that economies do

not exist in the abstract, but rather are embedded in social relations. AFN scholars draw particularly on Granovetter's 28 proposition that through social networks, people in market relations can work together to resolve difficulties. In this way, economic transactions are mediated by wider concerns as opposed to being solely guided by personal interests (Sage, 2003). Embeddedness has been interpreted in different ways in AFN scholarship (Feagan & Morris, 2009). Feagan and Morris (2009) for example, develop social, spatial and natural domains or interpretations of embeddedness. Most frequently, however, the focus in AFN studies has been on social and relational interpretations of embeddedness (Hinrichs, 2000; Kirwan, 2004; Sage, 2003; Sonnino, 2007). In this view, embeddedness reflects notions of connection, reciprocity and trust (Hinrichs, 2000), cooperation (Sonnino, 2007), and relations of regard (Sage, 2003). A wide range of practices, such as distributing information, hosting workshops, organizing on farm events, are suggested as central to creating favourable conditions for establishing trust, friendship and reciprocity that strengthen connections between and among producers, consumers and the environment. Indeed, these relations have come to be understood as a defining characteristic of the alternativeness of AFNs (Marsden, Banks & Bristow, 2000; Whatmore et al., 2003).

Despite its emergence as a prominent analytical tool and an "almost magical" (Hinrichs, 2000, p. 297) attribute of AFNs, increasingly scholars are re-visiting the utility of embeddedness in food systems research and a number of critiques have been posed. First, citing the broad range of interpretations noted above, scholars suggest the concept is fuzzy, and often its meaning is assumed in relation to the research findings versus being determined a priori (Sonnino, 2007). Second, scholars note that the concept of embeddedness is normative and poses 'alternative-good-local-embedded' against 'conventional-bad-global-disembedded' food systems, where embedded systems are treated as always desirable by default (Morris & Kirwan, 2010), and doesn't account for other factors such as price, availability, taste and so on, that affect food purchases. Third, there is little concrete elaboration of precisely how relations

²⁸ Much AFN scholarship extends Granovetter's theory of embeddedness to the concept of trust. However, Granovetter did not assume this linkage. Rather, he acknowledged that social relations can indeed leave a person vulnerable to deceit, as opposed to being automatically trust-based.

become embedded (Sonnino, 2007). Rather the scholarship assumes that anything and all interactions and behaviours, from sending newsletters out to posting signs in a market stall, contribute to embeddedness. Finally, scholars note that there is the assumption that embedded relations are of an 'all or none' nature and ignores the incremental nature of deepening social relations (Sonnino, 2007). These critiques have led scholars to conclude that embeddedness is not particularly useable for AFN studies. Winter (2003) notes "in truth, all market relations are socially embedded, and in a range of contrasting ways... We cannot equate 'alternativeness' with embeddedness in a deterministic manner" (p. 25). Instead scholars have argued that greater attention needs to be given to processes of embedding versus trying to measure the construct itself (Sonnino & Marsden, 2006).

6.3.2 Ethics of Care

Following from the theoretical predisposition toward post-structural and relational approaches to AFNs that frames my research, I have chosen to use the theory of 'ethics of care' (Fisher & Tronto, 1991; Gilligan, 1982; Lawson, 2007; Tronto, 1993) as an analytic to examine relations manifest in Chinese AFNs. This section overviews that approach and illustrates how it has been used in alternative food studies to date.

Ethics of care theory is about moral reasoning and a sense of empathy and responsibility for others. Fisher and Tronto describe caring to include "everything that we do to maintain, continue, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life sustaining web" (Fisher & Tronto, 1990, p. 40). Ethics of care originated as an ethical theory with feminist scholars, most notably Carol Gilligan (1982) who observed that people in her studies on identity sometimes made an empathetic, responsive and relationship-building responses rather than the expected rational and universal ones. Gillian identified this as an alternative ethical orientation. Considering the thought experiment she used helps to illustrate. She described a hypothetical dilemma for a man named Heinz. Heinz has a wife who is very ill and they cannot afford the medication that would save her. Should he steal the drug? Some people in discussing the dilemma juxtapose the question of protecting property and the question of protecting life, and following a universal concern for life advocate that Heinz

should indeed steal the drug and save his wife. However, Gillian observed that many of her subjects had a different response. Rather than this juxtaposition, they expressed concern for Heinz's wife and wondered how she would cope if he stole the drug and ended up in jail. Or they wondered how Heinz's choice would affect the drugstore owner that Heinz stole from. Gillian noted the joining of empathy, reason and relationships in these responses and coined this alternative orientation as care ethics.

How does the 'Heinz dilemma' apply to connectedness in AFNs? Like the concept of embeddedness discussed above, care ethics are drawn from the understanding that economic life and social life are not distinct. These relations are focused on a sense of responsibility for others and thus challenge ideas of individualism and of a society organized around efficiency and competition (Lawson, 2007). However, care ethics are not simply thoughts or propositions. Rather care needs to be understood as a set of practices (Lawson, 2007; Tronto, 2006). Care is both a consideration of, and a willingness to, take action about the needs of others. To illuminate this practice approach to care, Tronto (2006) has described four phases of care: to care about, to care for, to give care and to receive care. In elaborating these phases, she is clear that care is something everyone needs and everyone can be involved in. The following section briefly illustrates these phases of care with reference to AFN scholarship before using care ethics as a lens in the current research.

6.3.3 Application to AFNs

Kneafsey et al. (2008) have taken this theory and tried to understand how care can be understood as a practice in AFNs. Over three years, from 2004 – 2007, they worked with a collection of food enterprises that focused on producer-consumer direct connections. They employed Tronto's phases of care as an analytic to explore three sets of relationships in these networks: reconnections of producers with markets, reconnections of consumers with products, processes and/or place, and reconnecting people with nature. They found that "care-ful" relationships are a foundation to re-connecting among and between producers, consumers and food in these enterprises (Cox, 2010, p. 113). In particular, they identified care for local economies, environments and future generations, care for health and wholeness and care about transparency as "overlapping cares" evident in AFNs that involved both producers and

consumers. Further they found that these different care relations were important in the process of building trust in AFNs (Kneafsey et al., 2008, p. 212-214). A range of identities, practices and motives adopted by producers and consumers in AFNs translated into different ethics of care being demonstrated. Consumers for example, demonstrated strong caring for their own health, their families' health and for local economies. In comparison, producers demonstrated strong caring for the soil, the environment and future generations. However, face to face proximal relations does not guarantee caring, and care ethics can also be exclusionary and overlook needs of some (Tronto, 2006). In addition, Kneafsey et al. (2008) found that distant relations can also be characterised by care ethics. In particular reconnections can happen through electronically mediated mechanisms such as on-line purchasing and internet mediated schemes, suggesting caring in food relations can occur at a distance.

Finally, one of the most interesting findings of Kneafsey et al.'s (2008) research is the uncovering of a graduation effect in which, through the process of being part of an alternative, some network participants refined their skills and transferred their knowledge to other life situations. This led to building trust and deepening the relations in the AFNs, suggesting the potential for transformative change beyond the specific AFN initiatives. They argue that, "a broad ethic of care for others…acts as an important moral foundation upon which many decisions regarding food are taken. … This ethic of care can endow the discourses and practices of reconnection with radical and transformatory potential" (Kneafsey et al., 2008, p. 26).

6.4 Care Relations, Trust and Distrust in China's AFNs

As discussed above, some global north scholars argue that reconnections based in ethics of care and trust is a defining characteristics of alternative food procurement networks. Further, Chinese social scientists argue that exceedingly rapid social, economic and political changes, and accompanying food system industrialization, are producing disconnections in Chinese society. These disconnections are amplified by distrust in food resulting from a general perception of a food safety crisis and associated uncertainties. Care ethics makes a useful lens through which to examine interpersonal relations in Chinese AFNs because it moves well across different political philosophies (Robinson, 2010). In particular, care ethics

theory challenges the dichotomy between liberalism and socialism and between the individual and the collective, because it focuses on people's ability to fulfill responsibilities to others (Robinson, 2010). In this respect, comparative philosophy scholars also note that much of traditional Chinese thinking overlaps with concept of ethics of care (Shirong, 2012). Having overviewed the ethics of care theory, I turn now to China's AFNs to explore the ways in which people in these networks care about food relations and are demonstrating care for and with others (or not) in the human and non-human world.

6.4.1 Caring 'About' Food and Pragmatic Reconnections

Tronto (1993) describes the first phase of developing care ethics as "caring about" or the recognition that care is needed (p. 106). Producers and consumers in Chinese AFNs generally recognize that they have personal and family needs to meet and this is a precursor for their involvement in the network. As illustration, producers in these networks describe multiple motivations for their engagement with CSAs, farmers' markets and buying clubs, with many producers noting that they enter into relations with consumers for instrumental reasons, most notably to offer consumers the high quality food they seek. At the same time they express concern for the environment. Further, AFN organizers and CSA operators widely acknowledge that consumers enter these networks seeking safe food in a context of pervasive uncertainty about food quality. As described in the typology presented in Chapter 3, seeking safe food is the common motivation in these networks.

Beyond this conjoining of producers and consumers in the recognition of respective needs, consumers and producers in these networks are acting to deepen their connections. To illustrate, the farmers' market coordinator is continually trying to maintain and establish new connections with consumers and helping to shift consumers to a place of caring about food and food relations. Indeed a significant amount of effort goes into these general communications about the network. One market manager described, "It is like a window, where the market opens up a world of different foods, producers and relationships.... People can come and simply buy a few items, or they can get to know the people who grow their food better" (FMB1). Similarly, CSA operators are constantly trying to forge connections with members, and consumers who are not currently members to create an ethic of care about food. All the

CSAs I visited offer a calendar of diverse events as well as newsletters and blog posts that go beyond simple promotions of their goods.

I do not suggest that *all* CSA members engage in these 'caring about' relations. Indeed, echoing global north research (DeLind, 2003), despite ongoing attempts to draw members into closer participation in CSAs, often operators expressed disappointment at lower than hoped participation. As one CSA operator lamented, "*consumers have little understanding of the importance of small farmers or environmental protection; they only focus on food safety, and it seems impossible to interest them in anything else*" (FCSAIB4). Indeed CSA operators, market managers and buying club organizers alike explained their challenge with establishing connections with consumers given their strong suspicions of, and distrust in food relations generally, making the process of deepening the care and trust relations difficult. In the global north as well, many AFNs offer events and activities in the hope of drawing members into 'care-ful' reconnections but such initiatives are often met with lacklustre participation (DeLind, 2003; Feagan & Henderson, 2009). Often such instrumental consumer connections to AFNs are provided as evidence of neoliberal subjectivities and mainstreaming of the alternatives.

6.4.2 Taking Care of Self and Family in a Context of Distrust

Tronto (1993) describes the second phase of care ethics as 'taking care of'. In food procurement networks, 'taking care of' is evident when a person moves beyond simply recognizing the need of the other and takes on some responsibility for that need. In this way taking care of can be seen as a step toward more active engagement. For consumers in these networks, care ethics are most typically manifest by consumers seeking to take care of themselves and their families by reconnecting to healthy food. Consumers in these networks are motivated to do the best for themselves and their bodies in an environment of distrust in food they perceive to be frequently adulterated. As a consumer who began one of the buying clubs noted, "The whole reason we started this was because we all wanted to feed our children healthy and less adulterated food and we thought we could not do that by buying vegetables in the supermarket because we did not trust them" (BCIB1).

As described at the outset of this chapter, these AFNs exist in a culture of uncertainty, where the food and the food providers are seen with suspicion. The heightened distrust in food, which I encountered in every interview and site visit, is explained succinctly by officials at the China Green Food Development Centre who explained, "In China, 'food is God', so food safety is essential for the health and stability of society" (0410). People considering participation in China's AFNs are caught in the context of pervasive uncertainty, to which these networks have not totally succeeded in responding. It is the avoidance of distrust, not the positive motivation of trust, that draws consumers to these networks. One consumer I spoke with at one of the farmers' markets shared that she thinks buying food at the market directly from a farmer is the "least bad" option. When we asked her about trust she responded that she could not say she trusted the farmers at the market, but rather that she distrusted them less than others. The CSA operators as well as the market volunteers I spoke with concurred that they had not "won the trust" (FMB1) of consumers yet.

These findings echo both global north research and recent research in China. Direct connections between producers and consumers in AFNs seems to be just as much about an avoidance of distrust as a construction of trust (Chen, 2013a, Lamine, 2005; Little et al., 2010), leading to the conclusion that consumers join these efforts seeking to minimize risks in the context of food safety generally, and scandals more specifically. Producers are well aware of this primary motivation and do as much as they can to demonstrate transparency by engaging consumers to come to the farm. Nonetheless, care of self, family and one's immediate network is an early stage of care ethics and should not be dismissed as 'self-serving'. Seeking better food for one's family is a demonstration of care, even if the driver is fear and anxiety.

6.4.3 Taking Care of Self Through Reconnecting to Land

While re-connections and ethics of care between consumers and producers seem weak in China's social context of distrust, different kinds of ethics and re-connections seem to be more strongly enacted in these networks. Interviews, site visits and surveys illustrate that for many consumers, participation in these networks is a way of re-connecting, not to farmers, but rather to land. On the majority of the CSAs I visited, the operator sets aside a portion of the land, sometimes as much as one third of the farm, for members or sometimes non-members to

rent a plot and grow their own food with the assistance of the CSA farmers. Described as China's "weekend farmers" (FMIB1) this plot renting is part of a larger country-wide obsession with *nong jia le*, a popular form of agritourism in which middle class urban consumers visit farms for relaxation and solitude. *Nong jia le* is translated with phrases such as "happy farm family" (Sia et al., 2013) or "delights in farm guesthouses" (Park, 2008), and is a state-supported, cultural rural tourism trend in China and also South Korea, Taiwan and Japan. The weekend farmers at these CSA farms, like the *nong jia le* tourism, draw on contrasts between rural and urban life.

While most of the farms I visited had these weekend farmer plots, I was unable to interview any of these weekend farmers directly. So, in this section I draw on some recent research (Chen, 2013a) conducted on many of the same CSAs I visited, that provides a glimpse into these ethics of care for land. A few examples illustrate how this ethics of care for land is motivated by complicated values and beliefs.

6.4.3.1 Connecting to Land for Rest, Relaxation and Leisure

For some, this reconnection to land appears as another enactment of caring for oneself and thus might be considered as a form of respite or perhaps escapism from intensely urbanized environments. Indeed on these farms, the landscape itself seems to be more of a commodity than the vegetables, wherein consumers come to the farm to enjoy open space and fresh air while removing themselves from the dirtiness of food production:

The environment here is good, with fresh air and some green instead of cement. I love this place; it is so idyllic. I want to own apiece of land in the suburb after retirement. I love the relaxed natural living environment (Informant 19, cited in Chen 2013a).

6.4.3.2 Connecting to Land for Health and Well-being

However, for others it could be that this connection to land also links to personal wellbeing, supporting the idea that it is a demonstration of ethics of care for oneself. Indeed Tronto (1993) understands ethics of care for one's body and one's health, not as selfishness, but rather as a foundation upon which ethics of care for others and the non human world can be

built. Indeed, on many of the farms I visited, groups of members were assembled in collective exercise such as Tai Chi. Again Chen's (2013a) interviews with weekend farmers in these AFNs are helpful and fill a void in my own data. In his research, respondents regularly reflected on the health dimension and motivations behind their plot rental. For examples:

From the start, I thought this land area was very small, but the amount of labor required is actually very significant. Plowing, planting and watering made me very tired; however, I enjoy a better feeling about my body. I used to feel very tired half way home in my walk from my unit, now I easily walk all the way home without feeling tired (Informant 41, cited in Chen 2013a).

This is a way to relieve stress. Coming to the great farm is a kind of relaxation. I get relief from all sorts of pressures from work and my daily life. You will feel relaxed at such a green and natural place (Informant 15, cited in Chen 2013a).

For example, you may feel very depressed at work this week. However, once you come here, depressed feelings are quickly relieved. All of unhappiness will disappear through working (Informant 25, cited in Chen 2013a).

It seems that this focus on healthful and care-ful practices within a natural setting distinguishes Chinese CSA farms from those in the global north. While CSA research in the global north often cites health as a consumer motivation for joining AFNs, I have found no reference to the routinized practice of exercise, health and/or meditation on CSA farms, or in AFNs generally that I see in China's AFNs.

6.4.3.3 Connecting to Land as Producers

China's weekend farmers also blur the boundary between consumer and producer in these networks. AFNs are making land available to people who are trying to be more self-reliant in the face of food uncertainty. In this view, the consumer becomes a producer to contribute to their family's food security in the context of having no one else to trust. Chen's (2013a) research on weekend farmers supports this idea as well. He notes that for many, having

a plot of land to grow food on a CSA farm offers a chance to learn about and develop skills related to ecological farming. So there is a pragmatic side to the more emotional values of respite and relaxation.

Considering these examples, it is interesting that while ethics of care for producers seems largely absent in these networks, ethics of care for land seem strong and variously motivated. Through these AFNs, people are re-connecting to and caring for land for material reasons (safe food in a context of uncertainty), for symbolic reasons (source of peace and respite) and for personal health reasons. These findings also suggest an entanglement of producer-consumer identities in these networks, echoing global north research (Renting et al., 2012).

It is difficult to unpack exactly what this care for land entails, and even more mysterious to identify why it is so strong in China at this point in time. There seem to be several layers to this practice and as an unanticipated finding in this AFN research, it warrants further investigation. On the surface, weekend farming seems to be a simple nostalgia or a rural idyll that draws in self-interested urbanites in a movement that 'consumes' the countryside. Yet, these urbanites are not merely nostalgic about farms. The rural idyll motivates them to engage with these AFNs and grow food. Can this pastoral imagery be turned to advantage? Is this a first step toward deepening relations about land and building an environmental awareness with China's urban consumers?

6.4.4 Taking Care of Others – Laying the Groundwork for Trust

As illustrated above, consumers seem to be connecting to these networks because they distrust the CSA farms less than they distrust food and food relations in the dominant system. It is important to note that this is not saying that consumers in these AFNs don't care or don't have ethics. Rather, I am suggesting that in terms of procuring food through these 'alternative' networks in China, many consumers are motivated by the instrumental needs to 'take care of' themselves rather than being drawn into connections with the farmers in these networks. However, what is most interesting in this context is that CSA operators, farmers' markets volunteers and buying club operators in these AFNs seem undaunted by this lack of

trust and are persevering with continuous activities and ongoing internet posts through which they seek to build reconnections and care and trust in these networks. Interviewees detailed an impressive list of festivals, workshops, events, conferences and other activities all aimed at building what seems like hard fought for reconnections. As illustration, farmers' market volunteers post blogs before and after every market. The style is always positive and practical, with sharing of pictures from the market and recipes. One of the market volunteers explained, "Sometimes we are tired of this, but we need to keep energy about this. This is what will interest people in connecting further. They need to see we are having fun and then they are interested in coming to check things out." (FMB1). CSAs in the networks hold harvest festivals (FCSAB3, FCSAB1), workshops on traditional handicrafts (FCSAB4), exercise and relaxation courses on the farm (FCSAB4) and programs for school children (FCSAB4), all in an effort to deepen the consumer's experience and to strengthen relations of trust and care. Indeed, global north research suggests that ethics of care are constituted and deepened through such knowledge and practices (Kneafsey et al., 2008), and face to face relations between producers and consumers help to create caring relationships that are the basis of trust (Hendrickson & Heffernan, 2002). CSA operators and volunteers in China's AFNs seem to know this intuitively. As one CSA operator said, "You can't force people to care. But we can provide fun opportunities for them to feel more connected and that might help them move beyond their distrust" (FCSAB4).

6.4.5 Deepening Care and Co-constructing the Network

Tronto's (1993) ethics of care framework describes two final phases of care as 'caregiving' and 'care-receiving', where the receiver recognizes the care received and care relations are mutual (p. 107). While it seems that reconnections of care and trust are not guaranteed in China's AFNs, for some consumers, relations of care seem to deepen to these final stages of care relations over time. In particular, participants who are now taking organizing roles in these AFNs reflected on their own experience of care ethics and connections. They describe how they were initially drawn into alternative food procurement because, like many others, they were trying to find safe food, but they gradually became more involved in the network and in environmental issues more broadly, just as Kneafsey et al. (2008) uncovered in their research. As one of the market coordinators described, "I started like everyone else, I wanted safe food. I

was afraid of what I was eating. I heard about the CSA and went to the farm one day. I liked the energy. I was just like other consumers, I didn't know if I could trust them or not. I'm not sure why, but I just saw that there was something I could do.... I could help help the producers and also help other consumers find good food" (FMB1).

The narrative is the same for a woman who helped to start one of the buying clubs:

I was worried about the food I was feeding my child. We were all worried. So a few of us decided we had to do something more. We educated ourselves and learned so many things. We started with a book club and we read...... We knew we needed a different way to get food. We learned about [one particular] farm. But some of us had jobs and with small children and it was difficult to go to the farm. So we thought about working in partnership with those farmers to understand how hard it is for them, that they have difficulties too... how they produced food and to let them know about the quality of food we wanted and then to start a program with them (BCIB1).

In both these cases, distrust and care about one's *own* health motivated actions to connect, which then deepened to an ethics of care with others, where the identities of 'producer' and 'consumer' become blurred and entangled. As these women entered these AFNs as consumers, their role gradually changed and they became producers responsible for reconnecting others to food. Global north research also underscores this entanglement of producer-consumer identities (Renting et al., 2012, Veen et al., 2012).

6.4.6 Guanxi and Trust

The cultural construction and practice of *guanxi* is in many ways similar to what Tronto (1993) describes as care-giving and care-receiving, and it helps us understand how for some there is a deepening of trust in these networks, whereas for others, trust does not develop. Because *guanxi* engenders trust, it serves as a form of insurance against risk in networked relations (Gold et al., 2002). Once *guanxi* relations are established, trust deepens. But as one CSA farmer explained to me, you cannot "break into an existing network" because you first have to "pull guanxi" or take the time to exchange favours and build informal personal

relationships (FCSAB3). After a period of reciprocated exchange of favours, once an individual has 'pulled guanxi' or established trusted network relations, they can draw on those relations for favours, such as by joining a CSA. But, if someone is new to a non-kinship network, and has not yet established guanxi relations there, there is no basis yet for trust (Gold et al., 2002).

With this emphasis on *guanxi* or personal and informal ties, versus structures or institutions, the AFN movement in China is rapidly growing by always extending its relations. When a new person enters a *guanxi* network, their network is brought along too, and favours can be asked of these people (Gold et al., 2002). So in this way, networks expand rapidly. To illustrate, when I asked one CSA farmer how another farmer managed to grow her CSA so quickly (by 150 people in 2 months), she explained that it is because she "walked guanxi", meaning that the CSA operator had extensive *guanxi* relations, and these people would be obliged to join her CSA when she asked. So she was able to use her established connections for the purpose of starting the new CSA (FCSAB3).

6.5 AFNs as Windows to Trust and Reconnections

This chapter began by describing a changing and contradictory cultural political-economy landscape in China where a growing individualism and profit motives mingle with strong expectations that the state is responsible for ensuring food safety and security. However, against this backdrop, a food safety crisis has shaken people's trust in the state's ability to deliver on its part of the social contract, and in response people are seeking ways to forge new connections and procure safe food for their families. This story rings familiar in the global north, where scholars have suggested processes of reconnecting and re-embedding food relations is foundational to AFNs.

Using Tronto's (1993) framework of care ethics, I illustrated how relations in Chinese AFNs demonstrate pragmatic reconnections where people care about healthy and safe food and are drawn to CSAs and markets and buying clubs. In the context of pervasive uncertainty about food quality, these are connections motivated by distrust in the dominant food system versus trust of AFN operators. Indeed, in these networks, shaped by a powerful

suzhi discourse that portrays peasants as backward, not to be trusted and responsible for the food safety crisis, trust is hard to build. Consumers are more likely to connect to land as weekend farmers pursuing a rural idyll than to the traditional farmers who grow their food. Undaunted by the absence of trust however, AFN volunteers and CSA operators offer a continuous menu of activities and projects to draw people deeper into relations. For some connections in these networks progressively deepen, identities of producer and consumer become entangled, and some people establish relations of care and trust with others. In this way, these findings echo the work of Klein (2012) and Chen (2013a, 2013b) in suggesting that in response to disconnections through China's reform processes and the ensuing food safety crisis, people are actively seeking to rebuild ties and connections. The perception of a food safety crisis is thus stimulating the formation of AFNs as nascent forms of civil society organizations focused on food.

Further, among the core group of initiators and organizers in these networks, we see an emphasis on informal, personal *guanxi* relations which help build trust and expand the networks rapidly. This analysis offers support for the idea that Chinese society is experiencing multi-directional and contradictory changes (Kleinman et al., 2011), and we see strong *guanxi*-inspired networks and reconnections based on trust at the same time as as relations of distrust in these networks.

However, this needs to be seen as a preliminary exploration of the interpersonal relations in these networks. The cultural context and the interpersonal relations are complex, and the sample is small. This look at interpersonal relations in China's AFNs also leaves unsettled questions about how care ethics and reconnections move these networks beyond food procurement and distribution toward addressing questions of food system transformation. And, if these are indeed early networks of resistance, to what is this resistance directed and what forms does it take? These questions are tackled in the chapter that follows.

7.0 China's AFNs as Everyday Resistance

The previous section addressed intra-network relations and explored how AFNs in China can be understood as windows into diverse connections and reconnections based on an ethics of care, and how for some this process deepens into trust relations in this individualized and high distrust context. The final lens in my analysis asks: So what? Indeed, 'simply' reconnecting and caring, even in the reciprocated ways described, does not address ecologically degrading, and unjust conditions in which these networks are situated. In what ways do Chinese AFNs move beyond instrumental market relations to bring about structural change? In response, I note that, similar to their global north sisters, Chinese AFNs can be blind to privilege and perpetuate some of the very injustices they seek to transform. Yet, I argue that using inclusive and reflexive processes, participants are building diverse networks that hold transformative potential. In contrast to global north AFNs, however, in the context of pervasive uncertainty of an authoritarian state, Chinese AFNs have adopted a subtle everyday resistance style. I suggest that these AFNs are actively, though not always with full awareness perhaps, positioning themselves as a path or a 'portal' to building connections to broader emancipator spaces of global social justice movements.

Theories of resistance within geography examine the ways in which people react to and try to change that which exists (Rose, 2002) and a central theme is the ways in which people challenge dominant relations of power (Martin & Pierce, 2012). The resistance literature dovetails with a large scholarship on social movements and contentious politics (Leitner, Sheppard & Sziarto, 2008). Recently, scholars have begun to use these perspectives to consider the potential for AFNs, to take on transformative goals outside of the market (Lamine et al., 2012; Renting et al., 2012).

In this chapter, I consider the ways in which, in addition to being experiments in alternative economics, AFNs in both the global north and China embrace models of citizenship with action directed at the state. As background to this analysis, I first unpack the 'social justice critique' of AFNs in the global north to expose fundamental challenges that have been articulated. This social justice appraisal reveals AFNs as frequently exclusive and privileged,

often perpetuating the very types of relations they oppose. Responding to this critique, I summarize a shifting scholarship and join a growing number of scholars arguing that global north AFNs can be seen as operating 'beyond the market' with potential to become agents of transformative changes that address structural injustices. Here, I look at several recent AFN examples and summarize how they engage in resistance and challenge hegemony. I then situate this discussion in China where I describe the embedded and everyday resistance that predominates in an authoritarian state. I draw on an emerging literature on environmental NGOs (ENGOs) in China to offer some examples of typical resistance practices of civil society and its networks. Finally, I turn to Chinese AFNs and consider the ways in which these networks are challenging hegemony in this context.

7.1 Can we change the world by shopping? Or do we need a food fight?

Questions of whether the ethical consumption that characterizes market-based initiatives can create opposition and resistance to dominant unsustainable food relations have been debated in AFN scholarship now for two decades. Scholars continue to detail the ways in which AFNs can be places of exclusivity and privilege. Without explicitly working to transform these systemic inequities and power imbalances, AFNs can help to perpetuate some of the unjust relations they seek to alter (Allen, 2010; Allen et al., 2003; Allen & Sachs, 2007; Bedore, 2010; DuPuis, Harrison & Goodman, 2011; Guthman, 2008), leaving scholars calling for alternatives to the alternatives (Guthman, 2008). This social justice critique is summarized below.

7.1.1 Blind to Exclusivity and Privilege

AFNs have been criticized for their lack of inclusivity and diversity with scholars arguing that such initiatives and networks tend to be designed and enacted by those in dominant and privileged groups. This critique of AFNs argues that political activism through food is limited and restricted to those with capacity and resources and excludes people representing diverse genders, races, ethnicities and classes. Positions of privilege can be unwittingly upheld in AFNs by participants, often blind to power and privilege dynamics with regard to farmers and farm workers and issues of race, class and gender (Allen & Sachs, 2007; Slocum, 2007). Even in those alternative initiatives most widely considered to be fair and just

such as CSAs and farmers' markets, there can exist a tendency for farmers and organizers to see people primarily as shoppers and vendors, and perpetuate exclusive gender, class and race relations (DeLind & Bingen, 2008). This exclusivity in AFNs leads to a 'politics of conversion' (Childs, 2003) where an unrepresentative group (typically urban, white, middle-class males) outlines the path forward and in order to participate all other groups need to become 'converted' and follow the design or else remain invisible or become the targets of education, charity, or both (DuPuis & Goodman, 2005; Guthman, 2011).

7.1.2 Normative and Essentializing View of Scale

Social justice critics argue that AFNs frequently fall into the 'local trap' (DeLind & Bingen, 2008) when they present global and local scales as a dichotomy in which local is 'good' and global is 'bad'. In response, a significant scholarship has outlined how scale is socially constructed and not ontologically given and therefore there is nothing inherently more just or fair about localized AFNs (DuPuis & Goodman, 2005; Hinrichs, 2003). Further, while local food strategies can be powerful, adopting this normative view can result in exclusion of the non-local and thus perpetuate unjust structural conditions and in this way take a reactionary and defensive position to those perceived as external threats (Winter, 2003; DuPuis & Goodman, 2005). AFNs that have essentialized 'the local' often make both implicit and explicit normative claims in suggesting that the local scale is automatically characterized by democratic relations and/or ecological sustainability (Goodman et al., 2012). As Born and Purcell (2006) describe, adopting a normative and essentialist view of the local scale "leads wherever those it empowers want it to lead" (p.195) and, depending on the agendas of the leaders it empowers, this view can manifest as a "defensive localism that frequently is not allied with social-justice goals" (Born & Purcell, 2006, p. 202) leading scholars to call for a dereification of the local (Allen & Guthman, 2006).

7.1.3 Perpetuate the Conditions they seek to Oppose

A final aspect of the social justice critique of AFNs details how these market-based responses tend to produce individualist subjectivities that are a product of dominant neoliberal perspectives and thus another way that responsibility is devolved from the state to individual citizens (Goodman et al., 2012; Guthman, 2008; Allen & Guthman, 2006). In AFNs, these

subjectivities translate into individualist 'niche markets' comprised of producers and consumers, rather than collectivized, socially-conscious citizens, and do little to address structural inequalities and in effect leave the state 'off the hook' (Allen & Guthman, 2006). In this way, AFNs have been criticized for perpetuating the very ideals of neoliberalism they seek to oppose. This has led scholars to suggest the only meaningful politics in AFNs are those focused on collective action and resistance (Barnett, 2010) and to question whether action in the market can ever be a route to transforming structural injustices.

7.1.4 Voting with your Chopsticks

Other scholars see more transformative possibilities in AFNs (Dubuisson-Quellier, Lamine & Velly, 2011; Johnston, 2008; Levkoe, 2011; Pratt, 2009; Sonnino, 2010). Some have called the preceding views an "all-or-nothing style of neo-Marxist critique" (Barnett, 2010, p. 1881) that favours state-centric solutions and universalist politics. Scholars respond to the social justice critique by noting that neoliberal contexts cannot be assumed to automatically immobilize or co-opt alternatives (Micheletti, 2003). Indeed the hegemony of neoliberalism is not total and we have some degree of 'agency' to respond under these structural constraints. Drawing on the concept of 'political consumption' (Hassanein, 2003) these scholars suggest people can use the market to engage in 'boycotts' (avoiding negatively viewed products) and 'buycotts' (seeking out positively viewed products) to accomplish justice goals and through these actions it is indeed possible to overcome injustices by 'voting with your fork', or in China with your chopsticks. What emerges is the concept of the citizen consumer who entangles the public role of citizen with the private role of shopper.

7.1.5 Moving Beyond the Market

In order to move beyond a limited view of market-based responses, some scholars are beginning to conceptualize AFNs as complex hybrids of market and non market relations to consider the extent to which AFNs are "collectivizing consumption" and "reclaiming the commons" (Johnston 2008, p. 243) as ways to establish "collective subjectivities" (Levkoe, 2011, p. 691). These hybrid 'market-civil society networks' identify and work toward common interests and reframe analysis toward collective and away from individualist responses to food system challenges (Levkoe, 2011). In practice, building these collective subjectivities blends

market-based activities with 'civic' relations, where food is used as the entry point. In this view AFNs are seen as experiments which go beyond the market to include evolving forms of collective agency and non-market institutions (Pratt, 2009).

A variety of constructs have been suggested to convey the ways these networks function within the market as well as taking on characteristics of social movements in their pursuit of transformative change. For example, 'food democracy' (Hassanein, 2003; Shiva, 2006) and 'civic agriculture' (Lyson, 2005) have been advanced as better descriptors than 'alternative' for these networks. These notions centre the position of producers and consumers as acting toward common causes, building on "shared understandings and responsibilities" versus "agreement or sameness" (DeLind & Bingen, 2008, p. 130). Drawn from a republican tradition of citizenship, civic agriculture sees the individual not as a sovereign actor seeking universal rights, but rather as someone who deliberates with others to define responsibilities (DuPuis et al., 2011).

This collectivist notion of citizenship posits AFNs to be places where consumers have shifted from passive receivers of goods in the marketplace to proactive agents who work alongside producers and others through networks and coalitions. Their role is extended beyond ethical consumption and sending 'signals' in the market about their values to include collective efforts with others, such as policy advocacy, that shapes elements of the food system itself (Johnston, 2008; Koc, MacRae, Desjardins & Roberts, 2008; Lamine et al., 2012). At the same time, producers in AFNs have extended their roles beyond selling food in 'the market' to include activities that add value and educate buyers as well as the community at large about their food ethics (Little et al., 2010). This perspective on AFNs sees them as functioning beyond market relations to include a "myriad [of] social enterprises, non-governmental organizations, and other organizations working to reduce inequities in health and access to fresh, nutritious food, alleviate 'food poverty' and build sustainable local procurement systems" (Goodman et al., 2012, p. 82). As Johnston (2008) describes, "possibilities for a more balanced citizenship-focused hybrid may be found in different modes of food provisioning, particularly when they are framed by non-profit organizations more able to decenter the idea of consumer choice in the service of ideals like social justice, solidarity, and

sustainability (e.g., community supported agriculture, slow-food movements, community food security projects)" (p. 339). In these assemblages, producers also move beyond 'market' considerations to function as citizens who speak of their "moral rights and responsibilities" (Lamine et al., 2012, p. 391).

7.1.6 Unpacking the Concept of Food Citizenship

In the early days of alternative food scholarship, Welsh and MacRae (1998) described "food citizenship" (p. 237) as a construct demonstrated through the work of the Toronto Food Policy Council, emerging from "people's active participation in shaping the food system, rather than by accepting the system as passive consumers" (p. 239). Recently a group of scholars have again brought forward and elaborated the concept of food citizenship by looking at a range of different AFNs in Hungary (Balazs, 2012), France (Lamine et al., 2012), Italy (Brunori, Rossi & Malandrin, 2012), and Brazil (Lamine et al., 2012). These scholars describe the ways in which AFNs build alternatives in food provisioning as well as how they shape public options and actions through advocacy. This work is paralleled by recent work from Ontario on 'food hubs²⁹', (Blay-Palmer, Landman, Knezevic & Hayhuyrst, 2013). In the sections that follow, I move this conceptual discussion to a more pragmatic level and detail some of the characteristics and practices of these networks 'on the ground'. I look at these networks in terms of their actions, rather than how they are labelled, in order to ask, what are the ways in which these assemblages transcend the market and engage in forms of resistance that challenge hegemony and move toward system change? This analysis provides a foundation for my examination of these types of action repertoires in China's AFNs.

7.1.6.1 Reflexive Practice

Scholars underscore the importance of reflexive process as a way of working in AFNs. By working with a strong awareness of injustices and inequalities, networks can create an open process that guards against the risk of the privileged taking hold of and co-opting the process (DuPuis et al., 2011). Reflexive processes emphasize 'becoming' versus assuming

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²⁹ Blay Palmer et al., (2013) use the language of 'food hubs' in Ontario to refer to "networks and intersections of grassroots, community-based organisations and individuals that work together to build increasingly socially just, economically robust and ecologically sound food systems that connect farmers with consumers as directly as possible" (p. 524)

desired ends and are conscious of deficiencies and pathology possible in our actions (Amin, 2002). Reflexivity involves facing and deliberating about underlying assumptions, practices, structures and the various possible ways of framing problems and actions. AFNs demonstrating reflexivity build collaborations as "open ended stories" (Goodman et al., 2012, p. 24) rather than beginning with 'like-minded' people who hold a shared view of the world. This process has been described as "politics *in* place" versus "politics *of* place" (Amin, 2002, p. 397, original emphasis). Politics *of* place refers to pre-existing power relations in a particular territory, but politics *in* place is a "nonterritorial way of viewing place politics" and everyday ways of relating (Amin, 2002, p. 398).

This reflexive practice is evidenced in AFNs by the ways in which they make decisions and structure their coordination. To illustrate, in describing AFN action in France, Dubuisson-Quellier et al. (2011) and Lamine et al. (2012) provide examples of maintaining an open and inclusive process characterised by shared decision making and collaborative relations in the ways that the AFNs take on projects in the public interest, consciously thinking about and inventing ways of holding meetings and organizing advocacy that are more inclusive. As Goodman et al. (2012) suggest, AFNs need to struggle with difference and be inclusive of people with different worldviews rather than limiting their involvements to people with whom values are shared, noting that networks starting with shared values can be "intrinsically inegalitarian, because they are based on a single world view" (p. 156).

7.1.6.2 Strengthening Capacity and Building Skills

These market-civil society hybrid networks are continually working to build and strengthen capacities of stakeholders by offering and facilitating skill building opportunities (Mount & Andree, 2013). Such networks work as "platform[s] for interaction" around a range of issues (Balazs, 2012, p. 411). Scholars describing AFNs in Hungary (Balazs, 2012) and Italy (Brunari et al., 2011), for example, describe the ways in which the networks focus on the development of a broad range of food skills by creating social spaces for experience based learning such as farmer to farmer training, study circles, workshops, mentoring and apprenticeships. Typically skill development moves beyond simple knowledge and skill acquisition and adopts an empowerment objective by drawing together local-lay and expert-

scientific knowledge (as discussed in Chapter 5). Further, these networks work beyond food skills and also focus on developing capacities needed for transformative change by focusing for example, on how to plan and understand policy and how to negotiate regulatory environments and skills (Balazs, 2012). Finally, these 'civic food networks' also focus on building the capacity to engage the community around them through vibrant activities such as festivals and artistic events as well as community-based research and consultation (Lamine et al., 2012). AFN organizers understand that this broad range of skills and capacities must exist in their diverse networks if they are to challenge hegemony effectively.

7.1.6.3 Building Diverse Connections and Coalitions

Indeed diversity in these AFNs is the operative term. Blay-Palmer et al. (2013) detail diverse 'types' of AFNs, which they refer to as food hubs, in Ontario to include urban/rural composites, producer based or consumer initiated, and for-profit or not-for-profit leadership. These networks are equally diverse in their motives and the focus of action. Such diversity requires extending relations in complex assemblages, or 'networks of networks'. The research on food hubs in Ontario illustrates the complexity of these networks and the various connections they cultivate (Mount et al., 2013). Through the continuous building of alliances AFNs diffuse ideas for advocacy and action and also cultivate partnerships to expand resistance strategies (Ballamingie & Walker, 2013), drawing connections from beyond the local scale (Fridman & Lenters, 2013). Indeed, research into these networks concludes they can be left vulnerable if these broad connections are lacking (Nelson, Knezevic & Landman, 2013). Typically these AFNs build connections 'beyond the familiar' often resulting in 'strange bedfellows' where, for example, organic activists work alongside conventional agriculture groups to advocate for local food procurement, but then work in opposition to the same groups in anti-GMO advocacy. In this way, rather than being ideologically bound, AFNs construct relations with groups as needed based on how issues are framed (Lamine et al., 2012).

7.1.6.4 Diverse Types of Advocacy

Sometimes AFNs call for mobilizations and overt forms of resistance by way of protest campaigns (Dubuisson-Quellier et al., 2011). More typically, however, their resistance repertoire focuses on diverse types of advocacy, frequently involving business and/or state

representatives in the process, and typically using the media creatively. Advocacy issues are as diverse as the methods. In Brazil for example, rural development policy and nutrition policy came into focus (Lamine et al., 2012). In France, land use issues, water quality and energy use became central frames (Dubuisson-Quellier et al., 2011). In Hungary, AFNs worked in coalitions around tourism policies (Balazs, 2012). While in Ontario, protecting agricultural land and local food purchasing drew AFNs into complex advocacy networks (Ballamingie & Walker, 2013).

7.1.6.5 Food citizenship

In response to pervasive social justice questions, AFNs in the global north are taking the shape of complex hybrids of civil society and market-based activities and organizations that are variously active in processes of social, economic, ecological change. The degrees to which they are transformative is debated as scholars and practitioners alike acknowledge the need to move beyond individual approaches to change through collectivized action understood as 'food citizenship'. This action and discourse in the global north is based in a long history and culture of a civil society as something that is distinct from the state and the market. The situation in China is remarkably different in that there is no historic separation between the individual and the state, and the degree to which a new independent civil society is emerging is contested. This discussion of food citizenship leaves us with a key question. If the ability of these civic networks to influence broader systems and tackle structural injustices relates to governance and to the ability to form alliances within and across civil society organizations, what possibilities for such transformative change exist in contexts, like China, where such institutions are lacking?

7.2 Contention and Resistance in China

China is said to be in the "age of contention" (Yang, 2009, p. 42). The repression of the student democratic movement in 1989, which has been referred to as China's "enlightenment" (Yang, 2009, p. 86) marked the end of an era. The 'democracy wall' movement preceding this was a wave of protests that voiced a loss of confidence in the party state's leadership and called for democratic reforms (Yang, 2009, p. 86). This was a time of "effervescence" and "cultural and social activism" in which an incipient civil society emerged

and a "culture fever' of book publishing and public debate" ensued (Yang, 2009, p. 87). While these hopes ended with the Tiananmen massacre, the spirit of resistance in China is alive and well, despite risks of repression. My focus in this section is to understand and describe in a general sense the approaches to resistance in China and in particular the styles of 'everyday resistance'. This selective focus is not meant to deny the practice of overt resistance in China, as several categories of popular protests in the reform era can be detailed.

In the early 1990s, mass demonstrations orchestrated by peasant farmers successfully protested agricultural taxes (Li, 2012). These protests ended once the state abolished rural taxes in 2000, only to be followed by labour unrest. In both urban and rural industries, prompted by privatization of township and village enterprises, workers have been actively protesting unfair wages and job insecurity. In 2009 alone, approximately one quarter of China's 21.7 million industrial workers were involved in an estimated 30,000 protests (Yu, 2010; Wright, 2010). There are also continuing protests involving migrant workers, voicing grievances about working conditions, and unfair treatment under China's dual-citizenship program (Le Mons Walker, 2008). Millions of peasants continue to struggle against domestic land grabs (Wright, 2010). In addition, ethnic minorities in China (in particular Tibetans, Mongolians and Uighurs) have been actively protesting the Han Chinese influx into minority-dominated regions (Wright, 2010). Finally, environmental protests directed toward local polluters and the authorities who protect them have been growing in number and size. Environmental mass protest incidents have increased from an estimated 8,700 in 1993 to 180,000 in 2012, or nearly 500 every day (Yeh, O'Brien & Ye, 2013). Clearly there is widespread overt resistance in China.

In order to understand what underlies this resistance, I return briefly to the story of the Mandate of Heaven cited at the beginning of this dissertation and describe the concept of 'rules based' resistance that is the foundation of China's culture of contention. This leads me to explore the covert tactics of everyday resistance tactics prevalent in nascent civil society networks and they ways in which they are framing actions against the state as a backdrop on which to consider repertoires of resistance emerging in China's AFNs.

7.2.1 The Mandate of Heaven and Rules-Based Resistance

The Chinese term for citizen (*gongmin*) connotes "collective membership in the polity, rather than a claim to individual or inalienable rights *vis-a-vis* the state" (Perry, 2008, p. 46). As such, it sits in contrast to the liberal model of citizenship in the global north with its focus on universal justice and inalienable individual rights that shapes the social justice critique of AFNs presented at the start of this chapter. Indeed, the Chinese approach to citizenship is closer to the republican model that sees citizens as engaging in due process of collective decision making (Hall & Trentmann, 2005), which informs ideas of 'civic agriculture' and the types of reflexive AFNs detailed above. Whereas in classic liberal design there is a separation of state and civil society, in classic republicanism, there is no social sphere between the private and the public realms. The focus is on face-to-face deliberation and consensus among the assembled. Central to this notion in China is the view that a citizen is someone to whom obligations are owed through a 'social contract' with the state. In this sense certain types of contention and petitioning are encouraged. Indeed, in 1995, the state published the 'Chinese Citizens' handbook' which in essence outlines and clarifies the role of a good citizen (Anagost, 1997).

These notions of citizenship return us to the story of the Mandate of Heaven as a narrative that explains Chinese political philosophy. Chinese political thought is characterized by "an enduring emphasis on collective socioeconomic justice" and safeguarding "people's rights to subsistence and development" (Perry, 2008, p. 38-39). The people's 'contract' with the state guarantees them a minimum standard of living and the state's legitimacy to rule depends on holding up this end of the bargain. Perry notes how this notion of good governance, meaning the guarantee of minimal livelihoods of ordinary people, including a basic income, shelter, and sufficient food, predates western notions of citizenship by many centuries. This suggests there is an irony in speaking of China as a place of 'weak' civil society. The basic ideas behind the Mandate of Heaven story hold today, as evidenced in the way in which both covert and overt resistance is framed around the issue of rights to subsistence. Resistance framing in China seeks "welfare provision *from* the state" not "legal protection *against* the state" nor "demands for participation *in* the state" (Perry 2008, p. 45; original emphasis). Certainly there has been discussion of an emerging 'rights consciousness', but Perry responds

that what has been referred to as protests focused on 'rights', also follows the Mandate of Heaven political philosophy in that the protesters' demands are typically about subsistence and livelihood. She clarifies that claims to rights in China express group unity versus personal liberty and are thus linked to responsibility for a larger community, as opposed to the protection of individual freedoms as in liberal democratic framing (Perry, 2008). Perry and others differentiate the approach to protest in China from the global north by using the phrase 'rules consciousness' versus 'rights consciousness'. In rules conscious resistance citizens trust in the party state and are confident in its commitment to ensuring their subsistence. Rules conscious resistance works to refocus or 'call to task' the party state, urging attention to more just enforcement of rules in what has been called a "rightful resistance" approach (O'Brien & Li, 2006). In contrast, rights-focused resistance makes claims to entitlements that are not guaranteed by *existing* rules and therefore advocates for new rules.

7.2.2 Everyday Politics and Resistance

Everyday politics are defined as "people embracing, complying with, adjusting and contesting norms and rules regarding authority over, production of, or allocation of resources and doing so in quiet, mundane, and subtle expressions and acts that are rarely organized or direct" (Kerkvliet, 2009, p. 232). These everyday forms of politics are differentiated from more overt forms such as demonstrations, protests or campaigns, by their low profile as they typically involve little organization and are carried out as daily activities by people who may not even consider their actions as forms of resistance. Whereas "official politics" (Kerkvliet, 2009, p. 232) are often channeled through organizations to people in authoritative positions, everyday politics adopt more subtle tactics. Indeed James Scott (1985), who is perhaps best known for the study of everyday resistance in peasant societies, notes that there is a "vast territory" between compliance with hegemonic systems and overt defiance of them (p.136). Both Scott and Kerkvliet observe that we risk overlooking powerful forms of resistance when we focus only on visible and overt protests and rebellions. Instead they describe far more common tactics such as pilfering, slander, feigned ignorance, sabotage, deliberate 'slow downs', forms of gossip and sarcasm, and the use of the oppressor's language in ways that undermine domination (Kerkvliet, 2009; Scott, 1985; Scott, 1992). In detailing these tactics, Scott observes the divide between language and behaviour that dominated groups assume in

public and that adopted behind the scenes in private or semi-private environments. He distinguishes between "public transcripts" or the "open interaction between subordinates and those who dominate" (Scott, 1992, p. 2) and "hidden transcripts" or "discourse that takes place beyond direct observation by powerholders" (Scott, 1992, p. 4). Key to Scott's argument is the suggestion that beyond being forms of resistance, such tactics relate to the ongoing formation of identities where people can see themselves as citizens with independence, power and agency.

7.2.3 Resistance in a Context of Pervasive Uncertainty

Since the 1980s, the liberal democratic notion of the separation of state and individual has grown in Chinese society and a non-government sector has exploded to tens of thousands of NGOs (Hsu, 2011) in fields as diverse as education, environmental health, housing and poverty alleviation (Spires, 2011). However, scholars hasten to add that the interpretation of this expansion needs to be understood beyond mere numbers and that the Chinese understanding of NGO and civil society remains distinct from that of liberal democracies in the global north, so there are many questions about what exactly 'counts' as an NGO. NGOs in China are typically characterised by alliances with government versus independent institutions (Hsu, 2011). Indeed, registering an NGO in China requires a government department to endorse and sponsor the initiative, making official status impossible for NGOs with desires to resist state directives.

In its over arching goal of maintaining harmony, the Chinese state routinely places restrictions on NGO actions (Stern & O'Brien, 2012). In the face of rhetoric about "small state, big society", NGOs in China work near a "hazy, shifting boundary" (2012, p. 3) where mixed signals about what is permitted are common (2012, p.3). Hielmann and Perry (2011) refer to this process as "guerrilla policy making" characterized by "continual improvisation and adjustment" that creates a climate of "pervasive uncertainty" for those challenging the state (p. 12). Indeed advocacy on sensitive issues or use of particular tactics are more likely than others to land an NGO in trouble. For example, the state opposes actions that focus on demands for rights, or resistance that seems to be building cross-class or cross-locality alliances (Bruun, 2013; Stern & O'Brien, 2012). While sometimes the state responds to such resistance through

"enforced disappearances", which seem to be increasing (Human Rights Watch, 2011), a more common response is to entangle groups it considers to be destabilizing forces in endless bureaucracy and paperwork such as disputes about taxes or missing permits (Cai, 2008).

7.2.4 Environmental Non-Government Organizations (ENGOs)

Environmental NGOs (ENGOS) account for a major proportion of active civil society organizations (Yang, 2005) in China. Studies of ENGOs describe how their actions emphasize educational activities such as lectures, workshops conferences and newsletters as well as pursuing accepted legal actions such as petitioning the state with an action repertoire that is more about publicity than protest (Yang, 2005). Building networks around particular issues is common, but this is typically done through personal connections versus official linkages across organizations to avoid drawing too much attention (Yang, 2005; O'Brien, 2003). Generally ENGOs practice 'embedded activism' where their actions are taken in cooperation and partnership with authorities (Ho & Edmonds, 2008; Sullivan & Xie, 2009).

Yet ENGOs are also at the forefront of developing diverse collective action repertoires, led by activists who are educated and frequently linked internationally (Yang, 2005). Yang (2005) suggests ENGOs can be considered as "laboratories" (2005, p. 65), where citizens develop and practice skills of citizenship and "test the limits of Chinese politics by often operating without formal registration and organizing activities without prior official approval" (p. 65). O'Brien (2003) echoes this view in discussing pervasive use of "boundary-spanning" contention (p. 53) in which ENGOs use the state's own words in the formulation of resistance and collective action.

7.2.5 The Diffused Contention of the Internet

Operating close to the boundary of authorized channels in China, the use of the internet combines the potential of mass communication with individual, covert, everyday forms of resistance, making it a potentially powerful tool. Goubin Yang (2009) was among the first scholars to study the use of the internet in China. Building on Elizabeth Perry's notion of 'rules-based' framing, Yang (2009) notes that internet 'contention' is characterized by challenges to authority by appropriating state ritual and rhetoric. He describes the ways in

which on-line activism in China follows historically established practices and styles of contention with a focus on using rhetorical approaches such as issuing open letters and petitions and circulating slogans (Yang, 2009). However, he also details how the use of this media is rapidly escalating and diversifying, particularly among China's urban youth, to include newer styles of activism that range from the prosaic to the playful. So the 'rules' of contention could be changing. Yang elaborates the concept of 'diffused contention' to describe the everyday on-line conversations among Chinese 'netizens' as they open up and drift between on-line forums as easily as the government shuts them down. He suggests that taken together, this on-line dissent challenges state hegemony by offering critical perspectives that often deconstruct the discourse in the mainstream media.

Of particular interest to my research is the ways in which micro-blogging is used as a resistance strategy. Yang (2013) notes that when first launched in 2009, micro-blogging in China tended to focus on the non-political, but recent examples suggest that could be changing. Microblogs are open, accessible to mobile phones, and difficult to track. So they hold potential for connecting people in acts of resistance (Yang, 2013; Tong & Lei, 2013). Early research on micro-blogging in China has noted its success at building key opinion leaders and close linkages with the traditional media, including the potential for live broadcasting (Tong & Lei, 2013).

7.2.6 Is the Food in the Pressure Cooker?

There is almost no scholarship pertaining to food-related NGOs or food-related resistance in China, with the exception of the very recent analyses of responses to the food safety crisis described in the preceding chapter. I have joined colleagues in arguing that widespread food safety problems are motivating the formation of nascent civil society organizing around food as evident in China's AFNs (Scott et al., 2014). This suggestion has been supported very recently by scholars arguing that China's ongoing 'food safety crisis' is poised to evolve into a more organized form of resistance and could acquire 'sensitive issue' status, and thus could well be monitored more closely by the state, making it a particularly volatile context for resistors (Yang, 2013). In an analysis of Weibo micro-blogs, Yang (2013) concludes that the state has already begun to monitor sentiments about food quality on the

internet in order to anticipate crises and ensure 'harmony'. Jacob Klein's (2009, 2013) ethnographic work echoes Yang's suggestion that there is a diffuse and hidden resistance emerging around food quality and safety. He describes how in private, people are highly critical of China's food governance when it comes to food safety, but notes the absence of collectivized or organized food safety resistance making demands for change. It may be the food is in the pressure cooker, and could soon become more highly politicized.

7.2.7 Everyday Contention in China

This section has described resistance strategies used by emerging civil society networks and ENGOs. Rules-based resistance, everyday resistance and embedded activism are all forms of contention that enable people to take action in more prudent and subtle ways in an authoritarian context. They involve repertoires of subtle actions operating near the edge of what is authorized but without 'crossing the line'. Indeed, if done in a habitual way over time, these forms of everyday resistance can wear at the legitimacy of a system in the long run. The reason for the Chinese state's restrictions on large public gatherings (even, for example, the farmers' markets I studied) is their recognition that these assemblies can evolve into overt or confrontational styles when different individuals and small groups have the opportunity to 'join up' ideas, grievances and experiences. As yet however, there is an absence of information on what we could consider food-related resistance in China. The analysis that follows details the resistance repertoire of China's fledgling AFNs, and can be considered an early contribution to this nascent scholarship.

7.3 China's AFNs: Repertoires of Resistance

In this chapter's final section I draw together the preceeding discussions of food citizenship evidenced in global north AFNs and the everyday resistance styles that characterize the emerging civil society in China, to elaborate the repertoires of resistance manifest in the AFNs in the current study. In doing so I explore how the global north framework of food citizenship from democratic contexts characterized by elaborate civil society and political freedom can be applied in a more contentious authoritarian state context. I find the repertoires, tactics and strategies of AFNs in China, to some degree mirror those of global north AFNs. In particular China's AFNs demonstrate strongly reflexive and democratic decision-making

processes and share many of the same approaches to skill and coalition building with their global north sisters. However, there are also differences. In the absence of any public process for policy advocacy, Chinese AFNs draw more strongly on 'everyday resistance' and subtleties in how the state's language is appropriated.

The analysis proceeds as follows. First to avoid over-romanticizing resistance demonstrated in these networks, I draw on the social justice critique of global north AFNs to reveal ways in which these networks are blind to peasant justice issues. I counter this with an analysis of the ways in which these AFNs are using reflexive and inclusive approaches, coupled with a broad repertoire of everyday resistance strategies. I conclude with an illustration of how China's AFNs hold promise for transformative change through their connections to both indigenous and global justice movements, and in this way can be seen as 'portals' for social change.

7.3.1 Social Justice Critique Revisited

At the outset of this Chapter, I outlined the social justice critique of AFNs, noting that AFNs can be blind to justice issues and perhaps unintentionally exclude people in marginalized positions whom they seek to empower. Indeed much of the global north critique of structural inequalities that result from 'othering' is mirrored in my observations of Chinese AFNs. While the growing interest in the social economy (Chapter 4) and interpersonal relations of care (Chapter 6) illustrate ways in which China's AFNs are trying to construct more fair relations with peasants, it would be simplistic to suggest that these nascent networks have managed to challenge deep historical problems in their brief history. Indeed, my interviews reveal a deeply held historical distrust of peasants which works against reconnecting with the people who grow the food in these networks.

7.3.1.1 Peasants are Marked and Othered

As highlighted in the discussion of care relations in the previous chapter, China's AFNs privilege connecting to land and urban entrepreneurs who operate farms, versus to the peasants who grow the food and labour on these farms. However, it is not only the consumers

in these networks who display a distrust of peasant farmers, but AFN organizers and CSA entrepreneurs at times also seem to contribute to a marginalization of peasants.

For some of the CSA operators in these networks, peasant farmers are simply labour, and there is no attempt to integrate them into the decision-making on the farms. When asked about the involvement of peasants in the farms, these organizers replied that the peasants had lost traditional farming skills and that they would have very little to share in planning the work on the farm. This is an interesting perspective considering peasants come from families with hundreds of years of experience working on the land while the urban people starting these CSAs are new to farming. Indeed those CSA operators who come from urban rather than peasant backgrounds seemed blind to this othering and sometimes appeared more concerned about the availability of 'cheap labour' rather than celebrating or supporting recent state policies aimed at addressing rural marginalization. As one CSA operator highlighted, "It is hard to find workers now as the government is building factories in villages to slow urbanization ... there is little incentive for workers to come to the city to work anymore so it is getting harder and harder to operate a CSA" (FCAB4). She went on to recount how she uses the services of a recruitment agency offered by the municipal government to help her locate suitable workers.

This blindness to peasant othering extends beyond CSA operators. I attended a national CSA conference in Beijing to distribute surveys and was fortunate to sit beside a young Chinese university student who spoke English well and agreed to help me locate peasant farmers who might complete my surveys. Despite not knowing anyone in the room, she proceeded to point out peasant farmers to me explaining that she could identify them by their appearance and mannerisms, even though they appeared exactly like everyone else in the room to me. She explained that "They are of low quality in how they walk, dress and speak - I can tell by the way they are sitting that they are peasants from the countryside", thus reading the suzhi (Anagnost, 2004) of people from the bodily form, clothes and speech. This evaluation of peasants as being of low quality is widespread. Even the central protagonists in the AFNs I studied, who by all other accounts I consider as taking strongly egalitarian positions, at times seemed equally blind to peasant marginalization and injustice. For example, one of the buying

club organizers explained that she procures only from CSA farms operated by urban people and not peasant farmers because "they are hard to inspect and monitor because they don't have the environmental ideology" (BCB1).

I could share many more examples of the 'othering' in these networks and the marginalization of peasants in China generally, but for this purpose it is sufficient to say that these AFNs are largely mirroring the situation in the global north and that China's AFNs can reveal social injustice based on entrenched inherited inequities. Certainly there are efforts to address injustices in these networks through charitable acts. Farmers' markets use money raised from food sales to purchase food for peasants living in poor districts as well as to subsidize peasant farmers to attend training events and workshops. However, these localized approaches or 'band aids' do not fundamentally challenge structural conditions or cultural discourse, such as *suzhi*, that perpetuate marginalization. In the sections that follow, I explore the ways in which a more transformative politics are beginning to take shape in these networks, built on reflexive ethics and everyday resistance strategies.

7.3.1.2 Evidence of Reflexive Justice

As discussed at the outset of this Chapter, reflexivity or a politics of respect, is seen as an important aspect of AFNs seeking to embrace social justice concerns (Goodman et al., 2012). A reflexive process is one in which people are conscious of deficiencies and deliberate about their underlying assumptions and practices. A reflexive approach brings people together in open and inclusive processes. In this section, I argue that these networks demonstrate reflexivity in their attention to inclusivity and joint decision-making and as sites of struggle among diverse interests and emphasizing process over vision. Global north scholars remind us that it is through civic engagement and bringing together diverse perspectives that the alternative is advanced and perpetuated (Goodman et al., 2012).

7.3.1.2.1 Spaces of Struggle

Indeed, Chinese AFNs are demonstrating a commitment to inclusive and participatory process and are trying to broadly engage producers, consumers, peasants,

entrepreneurs, officials, media and many other people into assemblages that are non hierarchical, open-ended and networked. One of the farmers' market organizers continued to refer to these AFNs as offering a "platform" through which people assemble, discuss and develop initiatives noting that "Production and sales connection is only a small part of our market. Every year thousands of consumers come. We know this is not enough to change the big environment. But we offer this platform to let people know more about organic and about peasant farming. Some of these people will invent new activities to put on this platform, so it will never be just a farmers' market" (FMB1).

A reflexive approach embraces the struggles inherent in bringing diverse perspectives together. This is emulated by the process one of the buying clubs used to arrive at their particular definition of organic and the choice of vegetable suppliers. The club organizer explained how they needed to bring different perspectives together and talk them through. Some of her members wanted to be guaranteed that the farms they sourced from were only using inputs produced on the farm. But the farmers in their meetings told them this would be impossible and that they needed to use manure from other farms. Meanwhile the extension experts from the university who came to the meeting advised them that they needed to rely on chemical fertilizer or there would be no food produced for their club to procure. In the end, they arrived at a set of practices that described criteria for off farm inputs and prohibited chemical fertilizer, and accepted that this might mean lower yields. Their story demonstrates the tradeoffs made by bringing different perspectives together in an open and reflexive process.

7.3.1.2.2 Process over Vision

In several ways AFNs in China demonstrate reflexive justice in the ways in which they focus on process over vision and reflect consciously about their deficiencies. For example when I asked one of the famers' market coordinators about the ways in which peasant farmers in particular use the "platform" of the market she confirmed my observation that most of the people volunteering to organize the market, most of the sellers, and most of the buyers are middle class urban residents. However, she went on to explain:

You need to understand the situation in China about the peasant. No one trusts peasants. Most of the people who come to buy at the market would never buy their

goods. We want to change this. But we have only been doing this for three years and peasants have been oppressed in China for much longer than that. We know we need to expand in numbers and build trust. After that, we don't know. We will have to talk and consider. We have already gone to farms to meet with peasants and invited them to sell at the market. If people can begin to buy directly from a few peasants in these markets they will understand that they are not dirty and backward. They are efficient and hard working. We want to change things in China, but we can only walk one step at a time and cross the river by feeling the stones (FMB1).

This openness to ideas and commitment to participatory process is further illustrated by the way the AFN volunteers position themselves as receptive to new ideas and actions. One of the market volunteers described how sometimes people come forward with "different" ideas that at first seem perhaps a little "strange" and quite removed from the operation of the market. But after discussion, they find a way to move forward on these ideas. She explained that often these different ideas end up revealing the "fun" side of food, noting that their orientation has been to offer celebrations with food and festivals that connect people with local art and artists. Indeed, a review of their on-line calendar of events, coupled with the way they are continuously featured in media accounts, suggests a vibrancy about food. She described how her original "serious" approach has changed and how she has come to embrace the celebratory aspects of their work, asking: "Who wants to join something that is old and boring? Plus, who wants to volunteer their time in activities they don't enjoy? Of course we do this because we are having fun, and we want others to have fun too" (FMB1).

Reflexivity is a struggle and not all the encounters and debates in these heterogeneous processes conclude positively. On one of my visits, there had just been a significant disagreement between a central CSA organizer and other operators at her CSA. She felt they were moving more toward a business approach and focusing on production and member engagement and that they were losing sight of the underlying marginalization of peasants that drew them to start the CSA in the first place. The struggle was not resolved amicably, and the tension was obvious in several of the meetings I attended. In the end, she

moved on to remain involved in the network through a new CSA that experiments with new ways of empowering peasant farmers. Of course, the process has a positive character as well. The concern was 'tabled' in a way in which everyone was allowed to 'save face', while the elephant in the room was at least named.

7.3.1.2.3 Instrumental and Egalitarian

These examples reveal producers and consumers in these networks as self-aware, ethical actors who are actively constructing these networks as communities of practice. It is worth noting that all of the interviewees I spoke with, regardless of their role in the network (farmers, consumers, organizers) used the collective pronoun "we" in describing involvements, suggesting a feeling of 'being in common' with others. These and other examples depict the struggle in these AFNs to build a politics that expands opportunities for peasants and others through attention to reflexive practice. They demonstrate inclusive if not difficult dialogue that is attempting to bring together multiple perspectives, and the challenges in doing so. Global north scholars writing on the importance of reflexivity to social justice describe this process as "unfixed" or "dry eyed about ideals" (Goodman et al., 2012, p. 156-157). Such reflexivity is about struggling with different perspectives and options that arise from bringing diverse groups to the same table, rather than bringing like-minded people together. In essence, these responses demonstrate how Chinese AFNs are trying to be simultaneously instrumental and egalitarian. We see an ideology of the market and blindness to class inequality as well as reflexivity and a commitment to inclusive open process.

7.3.2 Everyday Resistance Strategies

The preceding discussion describes a way of working evident in these networks. In the following sections I look at the particular resistance practices or repertoire of Chinese AFNs, or how dissent is articulated. I observe that in general these are often subtle strategies of everyday resistance grounded by a rules consciousness (Perry, 2008). Some of these strategies parallel what we might call 'community organizing' strategies of global north AFNs and thus they are familiar to us. Yet, we need to remind ourselves of the context of pervasive uncertainty in China which these actions are situated. Indeed, operations at one of the farmers' markets in this research was shut down by the state a few months prior to my interviews

because too many people would be gathering in a location close to where a state assembly was going to be held. When I asked one of the market organizers if she ever worried about state repression, she smiled and told me that many of her co-volunteers suggest that she should be worried and tell her to "hide your ambition for fighting against the system". With a demonstration of remarkable strength she responded "Hide? Why? I have done nothing wrong. I am simply living in this world." (FMB1)

7.3.2.1 Slogan Adoption

For AFNs in the global north, efforts to advocate for policy changes is a central strategy for challenging hegemony (Koc et al., 2008; Lamine et al., 2012; Renting et al., 2012). In China of course, there are limited opportunities to participate directly in such processes. Instead in these AFNs we see that advocacy takes more subtle forms. As noted earlier, Scott (1992) describes the use of "public transcripts" or the "open interaction between subordinates and those who dominate" and "hidden transcripts" or "discourse that takes place beyond direct observation by power holders" (p. 2-4). In practice the difference can be rather understated as the following on-line conversations illustrate.

Throughout interviews and in blog posts, there was a continual reference to, and adoption of, government slogans and rhetoric, seemingly at every available opportunity. Indeed it was rare that an interview concluded without me making note of a government slogan. Throughout the period of this research, two slogans in particular were embraced and extensively shared within AFN communications. The phrase "ecological civilization" was announced in a speech of the 16th party congress in 2005 by Wen Jiabao, and re-confirmed in 2007 at the 17th party Congress by Hu Jintao. The phrase, "beautiful China", was introduced as a central state slogan by Xi Jinping in April 2013. I spent quite a lot of time trying to get people to talk about the meanings behind these often used phrases but this proved difficult. Interpreters simply used the phrase to explain the phrase and indicated that this was the state's direction. Finally one interpreter explained to me that these are slogans that really can mean whatever the state needs them to mean at any given time, noting that they "mean everything and nothing, like the famous phrase, 'with Chinese characteristics'."

I suggest that this slogan adoption is a way that activists can demonstrate support for, and alignment with government food related policy, yet criticize it at the same time. For example, sometimes people identified a policy in another country that they saw as desirable and then it would be linked to one of these Chinese state slogans, suggesting an ideological alignment. For example one blogger noted: "Allotments and community gardens in the US are farmland in the city for citizens and communities to rent and plant and some municipalities support this. Our government and developers could think this idea through and open up more land for citizens to use as farmland to help ensure food for China's ecological civilization". The tactic is part of the embedded activism approach where alignment with political rhetoric is key to maintaining productive relationships with the state. Some AFN organizers reflected quite openly on the strategy noting that "the reform policy of the country leads to the detachment of peasant from villages and we are trying to help them solve this, but some might worry about gathering of people together at the farmers' market because it could lead to unrest. It can't get too big. On the other hand, we think the government could be brought to support this. So to fit in we stay with the government and use their words so they will see us as allies." (BCB1)

7.3.2.2 Use of Sarcasm

Sarcasm and mockery are classic forms of everyday resistance (Scott, 1985). The online posts of AFN bloggers I monitored made extensive use of sarcasm, revealing their resistance to the state's policy directions. Indeed Yang (2009) notes that the internet has helped to escalate open mockery of official pronouncements in the way that state rhetoric is frequently re-appropriated. To illustrate, one of the CSA farms posted a commentary on a central government document referred to as "Central Document No 1³⁰ on the Three Rurals". The particular policy document the blogger refers to pledges to speed up agricultural modernization through subsidies to farmers. In discussing the document, AFN bloggers were clear to celebrate the focus of the government on improving livelihoods saying, "Beautiful China once again shows how proud we are of our farmers" but then the blogger added a note that is open to

³⁰ The title of Central Document No 1 refers to the central or key policy document of the current leadership and typically when announced, introduces a new slogan. The 'three rurals' refers to the interwoven nature of three 'problems' (wenti) of peasants (nongmin), rural society (nongcun) and agriculture (nongye) which became foundational to state rural policy in the 1980s. The configuration argues that rural wellbeing and surplus labour, rather than simply agricultural production, are key to development of rural China.

mixed interpretation: "how great it is that now for seven years in a row our government has been helping small family farmers. We know how much our separate bowls families benefit from these subsidies" (FCSAB4). The reference to 'separate bowls' refers to the move from collective to household responsibility systems (outlined in Chapter 4) which literally translated means a move from 'eating from one bowl' to 'eating from separate bowls'. The above commentary and ensuing responses can be interpreted as either authentic support for industrialization of agriculture and productivism or a commentary of resistance using sarcasm.

7.3.2.3 Use of the Internet

Criticism of state policy is not always so muted or hidden. Indeed in the protection of private interviews (where recording was seldom permitted by interviewees) many participants voiced open criticism of state policy. AFN organizers spoke critically about the lack of funding for organic agriculture noting that the state was only interested in funding large "*Dragon Head*" enterprises and not helping small peasant farmers. I also heard frequent criticism of the state's policies on land compensation and the corruption involved. In particular, interviewees criticized policies that deny equal benefits to migrants in the city and environmental policies such as subsidies for chemical pesticides and fertilizers. In addition there were many overt criticisms of the organic regulations and their enforcement as discussed in Chapter 5. However, the most significant criticism was voiced in reference to the state's inability to ensure safe food and the uselessness of food safety regulations and corrupt enforcement. What is striking is that frustration with the state's food safety governance was raised by *every* person I interviewed, even though none of my questions directly asked about this. Indeed, the extent of this dissent took me by surprise.

This dissent was also evident in internet postings. Beyond simply a recruitment and information dissemination tool, use of the internet, in particular the Weibo microblogs I monitored, can be seen as a foundational tool of resistance where people step out from behind the sarcasm and subtleties described above. In line with Yang's (2013) recent analysis of internet contention, I found bloggers to engage with food safety issues in particularly openly critical ways. The following are a few examples of posts:

We are tired of all the talk of food safety - its ridiculous - every day there is a new problem and the government is doing nothing. They are irresponsible. But they have their own special food supply so they don't care about us.(IB1)

There is corruption everywhere. Officials know about these problems and they accept bribes and leave the practices continue. It is embarrassing for me to say this to you. (FS1)

I don't understand how Chinese people can do this to other Chinese people - deliberate adulteration of food - but worse than that, I cannot understand why the government does nothing. Someone should resign. (OG1)

These echo findings in Yang's (2013) research. He cites remarkably similar postings such as:

There is too much talk about food safety, too much already. It's hopeless.

Manufacturers still do as they like. The supervisory agencies are still absent.

Common folks – just pray for your own luck.

We don't have the safe "specially provided foodstuffs" available to the privileged. We can only toughen up our own stomachs. Perhaps eventually we will evolve into some alien forms.

Yang has conducted extensive research on Chinese resistance and the internet. He underscores the significance of these food safety responses, which may appear rather benign to those of us participating in global north AFNs. However, Yang notes that in China's political context, some of these posts may trigger large-scale social disturbances that indeed threaten regime security; as one poster suggested: "If the food safety problem is still not solved in China, it will surely become the biggest problem affecting harmony and stability.

7.3.2.4 Evasion and Avoidance

In Scott's (1985) description of everyday resistance strategies, evasion and avoidance tactics figure proximately. In the current study, evasion can be seen in the way that one of the farmers' markets has no fixed location and keeps moving around in an effort to 'stay under the radar'. The volunteers explained that they are "technically illegal" as they are neither registered as an official NGO nor as a private business. Registering as an NGO and then running a CSA, farmers' market or buying club as a 'social enterprise' would be "impossible" because they have not identified a bureaucrat who would endorse them, and this is necessary in the registration process. Registering as a business would be possible, but they resist this because they do not see themselves as a for-profit entity. This greyness of their status presents challenges each time they organize a farmers' market because it prevents them from accessing the necessary permits for a public gathering. They have elected to operate through evasion where for each market (weekly throughout most of the year) they find another registered business, like a store or office, who has the necessary registration status and is willing to position the market as one of their events and arrange for the necessary permits. This evasion reinforces the observations of resistance scholars in China who note that organizations and networks are demonstrating dissent by operating close to the boundary that divides permitted from not permitted and by operating without necessary approvals (Yang, 2005).

7.3.2.5 Pilfering or Poaching

The resistance strategies described above, with the exception of a few peasant farmers whose internet posts I followed, are practices of urban educated individuals in key organizing roles in these AFNs. There is however, one particular example that illustrates everyday resistance strategies of peasant farmers in these networks. Indeed pilfering or poaching is a key everyday resistance strategy observed and documented by Scott (1985). One CSA operator described how the peasant whose land she leases would repeatedly "raid" the CSA farm and take whatever he wanted in what felt to her like an effort to subvert her project. She explained to me that from his perspective, he believed he was entitled to the produce from the land, since as a peasant farmer, he was the holder of the land use rights. She tried to explain to him that in leasing the land to her he was re-assigning those rights, but the pilfering continued. In describing the tactic she noted that such pilfering is to be expected, suggesting it

is a frequently used strategy which subtly resists the loss of land rights. She explained, "It is just what they do - it is their way of maintaining power in our relationship". In the end, the peasant and CSA operator worked out a compromise where "I plant for him his own small garden in a corner of the property near his house, and I tend it for him, and he can harvest as he likes" (FCSAB3).

7.3.2.6 Facilitating Voice

In the global north, policy advocacy as undertaken by AFNs frequently involves community-based processes which 'give voice' through democratic process to diverse community members often through grassroots research and consultation projects which organizations then use as basis for policy advocacy (Koc et al., 2008). In China such consultation has not been part of the ethic of developing policy. When I asked people if they had been involved in the process to create the state's organic standard for example, several different AFN participants looked at me rather incredulously and I realized it was a naïve question. In this context, I suggest it is quite remarkable that AFNs embrace nascent community consultation processes. For example, one of the farmers' market organizers used the coincidence of our presence in China to organize a community meeting in which we could help to "encourage" AFN participants with examples of AFNs and organizing activities from Canada. Far from being simply a venue for us to present information however, the meeting evolved into a forum where different perspectives were collated and the farmers' market volunteer prepared a document summarizing issues and themes important to China's emerging AFNs. On a subsequent visit, she showed the document to me and explained that it is their "version of your people's policy process" that "starts to organize our views of what is needed in China and the work that AFNs can do" (FMIB1). In a second example, one of the CSAs conducted a fledgling study of CSAs in China, documenting how many there are, and their types, and also exploring people's motivations for joining and concerns with the dominant food system. They shared their findings on-line, through their CSA newsletter, and at the CSA conference in Beijing. Subsequently this fledgling work was taken up by academics and

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³¹ One of the examples we shared in our presentation to the group was of Food Secure Canada's process of grassroots organizing through its Peoples Food Policy project.

enhanced and has become the early stages of a Chinese academic scholarship on AFNs (Chen, 2013a, 2013b).

7.3.2.7 Building *Guanxi*

AFN volunteers invest significant time enlarging their networks by forging ties with members of other nascent civil society groups, environmental NGOs and the media. However, the relationships with academic allies and representatives of the state seem particularly well developed. Several CSAs are connected to local government officials (FCSAJ2, FCSAB4, FCSAB6, and FCSAB3). For example, one operator described how a local government representative seemed quite interested in the CSA noting that even though he "can offer us nothing we need.... right now he can only offer us a reduced price on fertilizer, but we don't need that He will still be useful to us one day, so we keep inviting him to events and we bring him food because we are cultivating guanxi with him" (FCSAB6). For another farm, the relationship or "guanxi" cultivated with local officials paid off when the land they use was threatened by expropriation. She described: "See all these apartments - a few years ago this was a village. It is now gone, and here we are left, one little farm in the middle of this.... We would be gone too, except for guanxi we had built with some local officials" (FCSAB3). In another example, a farmers' market volunteer explained how she was building a relationship with the state's representative to IFOAM because he was influential and would be able to "assist them somehow in the future" (FMB1). Apparently she was right. As I noted in Chapter 4, some of the farms in these networks are now working with IFOAM on developing a Participant Guarantee System (PGS) of organic verification.

Cultivating relationships and building networks with academics seems to be a particular strategy with student projects and jointly organized conferences being common to several of the CSAs. For example, one quite influential academic is a strong supporter of the CSA approach and of AFNs. Dr. Wen Tienjun is a previous Dean of the Institute of Advanced Studies for Sustainability and the School of Agronomics and Rural Development at Remnin University and former advisor to the state council on rural development. He is credited with the formulation of the foundational 'three rurals' policy mentioned above and has continued as a strong advocate of positioning rural wellbeing in China beyond the question of agricultural

production (Wen, 2007; Wen et al., 2012). Dr. Wen spoke passionately about rural reform in China at both the CSA conference and the South-South development conference I attended as part of my fieldwork, and from the reaction of the audience I suggest he is seen as a kind of 'academic leader' of the AFN movement and offers it some legitimacy. He is also a leading protagonist of the indigenous rural re-development movement known as New Rural Reconstruction (Day, 2008; Hale, 2013) that is entangled with these AFNs as discussed below.

7.3.2.8 Trans-Local Linkages and Frame Bridging

The linkages being built by AFN participants extend beyond China and include a widening range of connections with like minded organizations and networks around the world. This heterogeneous alliance development is precisely the kind of process that scholars argue is most provocative to the Chinese state (Heilmann & Perry, 2011; Yang, 2009). While the state has been tolerant towards resistance that is limited to particular locations or isolated incidents or groups with small participation, large heterogeneous linked processes are seen as a threat to the state's hegemony. I argue that these global connections are examples of 'frame bridging' described by social movement scholars. Frame bridging refers to the process of building ideologically congruent discourse and practices or 'frames' that join up otherwise unconnected actors. I described earlier how diverse coalitions and networks are being built by AFNs in other parts of the world. The difference in this process for Chinese AFNs however, is that these linkages are through *personal (guanxi)* versus organizational connections in order to avoid the risk inherent in forming official and overt multi-network movements. In this way China's AFNs, while not engaged in transnational movements officially, are positioned as portals to a wide diversity of global movements for *individuals* interested in pursuing connections.

Some of these linkages have been advanced by a strong orientation to global north models that is endorsed by the state as part of its 'opening'. This approach has encouraged the drawing in of knowledge, experience and information from outside and indigenizing these with 'Chinese characteristics'. For example, two leading organizers in the AFNs I studied have strong affiliations with specific international NGOs. Moving beyond these particular and *official* connections, I uncovered a number of *personal* connections to global food and environmental justice movements, where there is an entanglement of relations that is difficult

to unpack. Perhaps the strongest example of this is the entanglement between the New Rural Reconstruction movement, global food justice movements, and the AFNs.

New Rural Reconstruction (NRR) is a decade old re-articulation of a populist movement which existed prior to the Mao era and focuses on developing new directions for Chinese rural society. NRR is neither intellectual nor overt rural dissidence against the state. Most of the movement's organizers (perhaps with the exception of a younger and more radical fraction) avoid contentious politics and emphasize harmonious relations. NRR is both an academic critique of capitalist economics and a set of practical experiments and projects that are focused on re-building rural-urban relations around agroecological production and reviving rural traditions. Academics associated with NRR argue that the problems of rural China cannot be understood simply through an economic lens. Rather rural social life needs to be 're-constructed'. The movement's projects are diverse and include establishing rural credit unions, farm supply cooperatives, a distillery, a performing arts troupe, childrens' centres, thrift stores, pro bono legal services, and a wide diversity of ecological farm cooperatives (many of whose products are found at the farmers' markets and CSAs I visited). In many ways, NRR is what we might call a community economic development movement that links together social, economic and environmental goals through grassroots experiments and initiatives.

NRR intersects with AFNs in complex ways. First, several of the CSAs instrumental to forming these AFNs are operated by individuals who are also taking key roles in the broader NRR movement. Thus these CSAs and by extension the broader AFNs are part of the experimental work of the NRR movement. Second, at several CSAs, young people who have grown up in urban areas but have rural ties, have been developing farming skills with the intention of "returning to the countryside" (NGOHK1) to start ecological farms and bridge urban-rural difference. One of the NGOs I interviewed described this as a "fast growing and new phenomenon evolving out of AFNs and NRR in China" that they want to further study, understand and support because it opens up "many new possibilities and hope for rural China". These projects, which were showcased in both the CSA conference and the South-South conference I attended as "young people return to the countryside" projects, are developing as central experiments of the NRR movement. The project surprises and interests

Chinese NGOs and academics because it contrasts with the prevailing urban perspectives that see the rural as backward, fuelled by the memory of harsh times in the countryside in the Mao era.

Through this close association with NRR, AFNs become a portal, or a path to linkages with trans-global food justice movements, that otherwise have no official presence in China. Indeed in research on NRR in China, Alexander Day (2008) and Matthew Hale (2013) describe these connections and illustrate the ways in which the NRR movement resonates strongly with non-Chinese movements such as the Zapatistas in Mexico, the Landless Workers Movement (MST) in Brazil and La Via Campesina, highlighting attendance at conferences, meetings and anti-WTO protests outside of China. Representatives from these global justice movements were present at the South-South conference I attended and it was clear that many AFN organizers have established personal relationships with these groups. In this way China's AFNs open the door to participation in global justice movements while remaining under the state's radar.

This analysis opens up our understanding of advocacy and political action to reveal subtle yet powerful forms of everyday resistance around food that occupy the large space between compliance with hegemony and overt defiance. China's AFNs work at a 'hazy, shifting boundary' (Stern & O'Brien, 2012, p. 3) between permitted and prohibited, and a climate of "pervasive uncertainty" (Heilman & Perry, 2010, p. 22). This section has revealed a diverse repertoire of everyday resistance strategies being rehearsed and practiced within China's AFNs. Strategies include appropriating government slogans, sarcasm and mockery, evasion and avoidance of state requirements, building connections and pilfering. Given its diffused nature, the internet in particular provides new possibilities for more overt dissent as the growing contention around food safety governance suggests. I've also highlighted how these networks are using nascent community organizing strategies to facilitate grassroots participation in a context where there is limited 'bottom up' policy process. Finally I described how entanglements between these AFNs, the New Rural Reconstruction movement and transglobal food justice movements open up possibilities to join with global food justice groups that have no official presence in China.

7.5 From a Window to a Portal

This chapter has argued that AFNs are not simply sites of material transactions. They are also places where community is being built and hegemony is being challenged. Consumers and producers are working together in these networks, in market-based as well as civil society relations, to articulate everyday resistance for social change. While these are on one hand 'market-based' networks, I suggest that 'voting with your chopsticks' does not capture the identity and relations of China's AFNs. Rather these are networks where 'food citizens' are being enacted, decentering private needs and centering actions for the public good by calling the state to task using subtle forms of everyday resistance.

I began by detailing the 'social justice critique' of AFNs and described how networks in the global north can be blind to privilege and marginalize the very people whom they seek to empower, underscoring the need to transform structural conditions and deep historical problems that marginalize many. This idea of moving beyond the market is being reflected in AFN discourse on 'food citizens' and 'civic networks' that sees these networks as moving beyond the market to embrace non market relations and institutions that centre common interests and collective action in addition to private and material action of growing and procuring food. Drawing on a set of recent descriptions of AFNs from Europe and from Ontario, I illustrated how networks are articulating collective agency through open and inclusive practices, building diverse networks, strengthening capacities and skills, building broad coalitions and engaging in policy advocacy.

In examining China's AFNs, I found a mirroring of the global north social justice critique. In China, while the growth of the urbanized middle class, and their desire for higher quality food, makes these alternative networks possible, it also shapes them in a way that subjugates peasants and privileges entrepreneurs. There is a deep historical distrust of peasants which works against re-connecting with the people who grow the food, and raises fundamental questions about food justice in these networks. In this context, it seems that these alternative networks can be instruments of exploitation and domination of peasants just like the system they reject. In China, the industrialized production of 'cheap food' and the alternative production of 'quality food' can both be blind to privilege and subjugate peasants.

Yet these are remarkably reflexive networks where struggle to address underlying inequities is evident. I described how these AFNs are working to engage diverse interests and focus on open deliberative and imperfect processes. They sit in an authoritarian context where there is no historical separation between the private and the public, and the boundary between what is permitted and prohibited is in constant flux. China's AFNs offer platforms for people to come together, through food provisioning, and then build connections and skills for social change. The networks described here demonstrate how we can widen the lens on the 'food citizen' to include a broad range of everyday resistance strategies, drawing primarily on approaches that are covert in the context of pervasive uncertainty. I described a broad repertoire of everyday resistance strategies including appropriating government rhetoric, sarcasm and mockery, evasion and avoidance of state requirements, building connections and pilfering. Given its diffused nature, the internet in particular provides new possibilities for more overt dissent as the growing contention around food safety governance suggests. I also highlighted how these networks are learning and using nascent community organizing strategies in a context where there are no public policy development processes. I detailed how these AFNs are highly connected and trying to draw support at diverse scales including both indigenous rural development movements and foreign NGOs. I concluded with an illustration of how these AFNs offer a portal through which people can connect to trans-global food justice movements that have no official presence in China.

In a landmark paper, Allen et al. (2003) introduced the the analogy of tectonic plates to ask, "To what degree do [AFNs] seek to create a new structural configuration – a shifting of plates in the agrifood landscape – and to what degree are their efforts *limited* to incremental erosion at the edges of the political-economic structures that currently constitute those plates?" (p. 63, emphasis mine). In response, I suggest China's AFNs demonstrate neither a collision of tectonic plates, nor erosion at the margins. Indeed, these networks are articulating a space of everyday resistance that lies between overt hegemonic challenge and isolated private actions. Framed in the context of an authoritarian state, China's AFNs are revealing a repertoire of resistance strategies of the mundane, subtle, low profile and mostly 'under the radar' sort.

8.0 The Beginning

Scholars studying AFNs have struggled with question of whether these initiatives are a type of utopian entertainment for a few middle class consumers or the beginning of a political struggle that configures new food system relations (Goodman & DuPuis, 2002). My response is that in China, they are both. This research has presented an early account of new forms of producer-consumer provisioning networks emerging in peri-urban China. I have explored the 'alternativeness' of these networks along economic, ecological, interpersonal and political dimensions, using four different theoretical perspectives – diverse economies, functional integrity, ethics of care and everyday resistance. The findings complicate dualisms and binary thinking, and I have argued that instead of fitting into the 'either or' categories, China's AFNs need be seen as hybrid systems with a 'yes and also' nature. Shaped by strong imaginaries of traditional Chinese agriculture, these AFNs are economically diverse and reveal re-connections between people and land and a repertoire of everyday resistance strategies.

In Chapter two, I introduced the concept of AFNs and developed my theoretical and empirical approach. Here I reiterated calls in the global north scholarship for 'opening up' how we think of AFNs and moving beyond binary thinking to consider how these networks articulate hybridity and diversity. I adopted a post-structural political economy approach to accomplish this and introduced four dimensions to the study of these networks – economic, ecological, interpersonal and political. Drawing on four different theoretical perspectives, I developed a set of empirical 'lenses' as analytics. Finally, I described a multi-case, multi-method approach to study AFNs in peri-urban China.

Following this, in Chapter 3, I detailed how diverse food initiatives including CSA farms, buying clubs and farmers' markets, are coalescing into networks in China's peri-urban landscape. I positioned these networks as emerging in a contradictory place. Economic and social reforms have contributed to China's emergence as the world's largest food economy. Yet its transitional food system remains a hybrid of traditional and modern firms, farms and institutions. To help us understand the AFNs in this landscape, I introduced a typology that shows the diverse motivations behind their emergence. AFNs in China have been initiated,

primarily, by an educated, urban middle class group, responding to concerns about the loss of traditional agriculture, environmental degradation and a pervasive 'food safety crisis'. However, these motivations are not shared by all the affiliates in these networks. Some network participants, notably 'weekend farmers' who visit farms to join in food production, appear motivated by a traditional pastoral that elicits a powerful set of ideas and nostalgia about historic farming in China. They share this value of tradition and a care for land with AFN farmers, but are not motivated by the same environmental concerns. Further, these participants, along with buyers at the farmers' markets, and most members at CSAs and buying clubs, engage in AFNs out of a concern for food safety and a need to procure food they understand to be safe for themselves and their families. In this way, AFNs sit in a contradictory place where multiple motives circulate.

Building on this description, each of the subsequent chapters (Chapters 4-7) drew on a different analytic to explore China's AFNs. These four chapters developed the argument that AFNs can be understood as hybrid relations, in particular: economic hybrids of capitalist and other-than-capitalist forms, ecological hybrids of traditional and modern practices, consumer-producer entanglements, and political hybrids of market and civil society relations of resistance. Further, these four chapters revealed a set of economic, environmental, cultural and political characteristics in the China context, that work in contradictory ways to explain the particular forms these AFNs take. In this concluding chapter, I re-visit these conditions and summarize the ways in which they shape China's AFNs, and reflect on how these AFNs might inform global north theory and practice.

8.1 Conditions Shaping China's AFNs

This research reveals a particular assembly of economic, environmental, cultural and political conditions or characteristics of China's context, that reinforce the initiator's motives and drive the formation of these alternatives, and/or restrain their articulation and serve to perpetuate mainstream food relations. In this way, China's AFNs are simultaneously being supported and held back by these conditions, as illustrated in Figure 9. However, this constellation of conditions doesn't appear as a set of cause and effect relations that can be quantified. Nor do I present these 'driving and restraining' factors with the goal of using them

to predict the future course of China's AFNs. Indeed, these conditions are always shifting, and both shape, and are shaped by, China's developing AFNs. So the future is open. But for the present, this particular set of conditions helps to explain why China's AFNs take the forms that they do.

In interrogating China's AFNs, as discussed in Chapter 2, I have tried to bridge a conceptual divide between research that focuses on agro-food production from a political economy perspective and that which focuses on consumption using a cultural theory perspective. Such a hybrid approach reveals AFNs as influenced by an interaction of politicaleconomic or structural conditions, as well as social-cultural factors, such as systems of meaning, values and beliefs. The result is the diverse mix of economic, environmental, cultural and political characteristics of the contemporary China context, that influence these AFNs shown in Figure 9.

Conditions Shaping China's AFNs

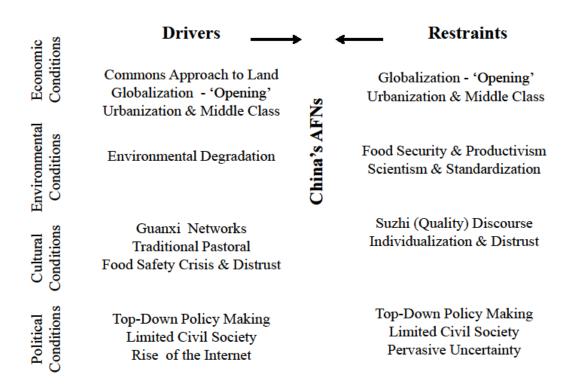


Figure 9: Conditions Shaping China's AFNs

Source: this author

Economic changes and globalization in China's process of reform both drive and restrain the development of AFNs. Agrarian reforms, specifically the egalitarian distribution of land and the *hukou* approach to citizenship, set the stage for China's explosive economic growth in the reform period. Not only did these changes open the door to capitalist relations and the development of a middle class, they also made land available for AFN initiation. On one hand, China's AFNs are made possible by urbanization and a middle class in pursuit of better food quality. But on the other, their consumerist and individualist ethics present challenges for AFN development. The impacts of globalization and China's 'opening' are also mixed. While these processes have presented challenges for smallholder agriculture, at the same time global connectedness makes it possible for egalitarian minded urban consumers, to draw AFN models and supports from the global north.

China's reforms have been underpinned by an uncritical view of science and technology, and a preoccupation with food security that have reinforced a productivist approach to agriculture as the foundation of the socialist market economy. Embracing productivism wholeheartedly has resulted in negative environmental impacts. China's productivist legacy is only just being revealed, and the very changes that helped production soar to meet food security goals, may now be posing the barriers to meeting those goals in the future. While the resulting environmental degradation is a strong motivator for the formation of AFNs, the strong ideology about productivism, technology, and need to be food secure, shapes and limits the ecological practices in China's AFNs. Further, the dream of agricultural modernization and the state's focus on food security through science and technology has driven traditional agriculture to the margins, paradoxically recalling a traditional pastoral or idyll that motivates urban producers and consumers alike.

Cultural conditions are also strong influencers of China's AFNs, often working in contradictory ways. By 'cultural conditions', I mean the meanings, beliefs, ideas and practices of everyday life. This research has identified three cultural threads, or sets of meanings, that intersect in complex ways with political economic conditions, to give China's AFNs their particular characteristics. As noted in Figure 9, the traditional Chinese pastoral or rural idyllic, the discourse of *suzhi* (quality), and the traditional practice of *guanxi*, suggest a central, and

often overlooked, role for such cultural tropes in explaining AFNs, in China as well as the global north.

Lastly, the top-down decision-making, and pervasive uncertainty of the authoritarian state has profound influences on the development of AFNs. The absence of civil society institutions, the bureaucratic requirements for NGO registration, and the seemingly excessive state oversight of mundane activities like holding farmers' markets, no doubt have slowed the development of civil-society based food alternatives in China. Yet, at the same time, the absence of civil society institutions and the state's top down decision making, are prompting democratic action in these networks such as civil society organizing, bottom-up standard development, and acts of everyday resistance. Indeed China's unique context shapes AFNs in complex ways. I offer four narratives that describe how these conditions interact to articulate four different types of hybrid relations in these AFNs.

8.2 Economic Hybrids of Capitalist and Other-than-Capitalist Forms

Agrarian reform in China, in particular the commons approach to land and the dual urban-rural citizenship provided by the *hukou*, shapes the economic relations in these networks to take diverse and hybrid forms. Drawing on the diverse economies approach, in Chapter 4, I detailed the hybridity of capitalist and other-than-capitalist relations in these networks. While instrumental and pragmatic relations, led by young urban 'entrepreneurs' are indeed proliferating in China's AFNs, these profit-oriented forms do not eclipse other ethics. Motivated to repair urban-rural inequities, the protagonists in these networks are supporting and re-building peasant forms of agriculture which focus on livelihoods and re-investment of surpluses into the farm's ecology. The young, initiators of CSA farms in these networks are able to earn a living from farming, without privileging capitalism. AFNs in China are characterized by economic diversity. Capitalist relations involving waged labour, financial investment and surplus extraction co-exist in exchange relations with peasant economies characterized by self-labour, self-provisioning, a focus on livelihoods, and attempts to empower the peasantry by building rural-urban connections and markets. The result is an entanglement of capitalist and other-than-capitalist relations in which we see the persistence of

the peasantry, de-peasantization and re-peasantization processes occurring harmoniously and simultaneously.

These AFNs are evolving in a context where smallholder production is dominant, and where land consolidation cannot readily occur in the context of a commons approach to land and China's unique *hukou* citizenship system. As a result, entrepreneurs in urban areas have access to peri-urban land through land leases, facilitating urban initiation of AFNs. The land-labour relations in these networks are a reversal from those studied in global north AFNs, and reveal the fundamental role that agrarian history and land tenure has in shaping alternatives. Public land ownership, where entrepreneurs need to negotiate for land access with peasants, who hold usage rights, complicates land-labour relations based on private land tenure in the global north. The effect is that the small farms in China's AFNs are 'normalized' in this landscape of other similarly scaled farms. Unlike in the global north, where small farms are dwindling in numbers and are marginalized by land consolidation processes, there is nothing 'niche' or 'fringe' about the economics of CSA farms in China's small farm context. Certainly, China's accelerated global trade has introduced vertical consolidation and 'supermarketization' processes. But at least in the present, land policies have the effect of buffering those processes. The growing middle class, made possible by China's 'opening' to global trade, provides both the initial impetus and sustaining resources for these AFNs. The emergence of an educated, globally aware and connected social group, open to the influence of global north alternatives, initiated these networks by indigenizing CSAs, buying club and farmers' market models imported from the global north. Further, following the ancient practice of *guanxi*, these AFNs grow quickly in what seems like a cultural aptitude for both personal and electronic networked relations.

China's growing middle class, with its rising disposable income and concern for food quality, also provides the members and buyers in these networks. Yet, here we see the contradictory influence of China's cultural context. Despite the strong motives of the AFN initiators for food alternatives that bridge urban-rural differences and are more fair for peasant farmers, China's pervasive *suzhi* discourse perpetuates a view of the peasantry as backward and uncivilized. The result is that it is difficult to foster direct market relations between

peasants and urbanites, necessitating instead AFNs that are configured around urban entrepreneurs and new peasants as intermediaries in the buying clubs, farmers' markets and most of the CSAs. The powerfully egalitarian commons approach to land that sits at the foundation of these networks and makes them possible, is trumped by the cultural discourse of *suzhi* which excludes the very peasant farmers whose practices are idealized. China's peasants are dispossessed not materially, but rather through discourse.

8.3 Ecological Hybrids of Traditional and Modern Production

China's AFNs are constructing meanings of 'organic' and ecological in the context of a state-led, top-down approach to ecological sector governance and standardization. The path of agricultural modernization in China has followed a model of technologically-driven productivist agriculture, driven by an obsession with food security, and in this context traditional agriculture has been driven to the margins. China's AFNs are challenging the state's version of ecological agriculture by seeking to re-kindle the traditional agricultural practices it has abandoned. Drawing on a powerful cultural idyll of traditional farming, China's AFNs adopt a philosophy that traditional practices can be re-articulated with modern practices in a type of ecological hybridity. The farmers in these networks draw on seed and species biodiversity and minimize externally sourced inputs through a reliance on closed loop approaches. At the same time however, these AFNs are strongly influenced by the dominant productivist ideology of the state and associated market pressures, resulting in the absence of some key ecological practices that protect soil resources. In the absence of organized civil society or government support, these producers, many of whom are new to farming, are challenged to identify and learn about traditional and/or ecological farming practices. In response, farmers and consumers are supporting each other in these networks to build food skills and celebrate both traditional and modern ecological practices.

Further, reacting to a widespread distrust of state-led organic and ecological agriculture institutions and their official policies, both producers and consumers in these AFNs are forging bottom-up responses. Producers are working to build the transparency consumers seek through extensive on-line and on-farm information sharing. Meanwhile, consumers starting buying clubs and farmers' markets in these networks, are resisting and reconfiguring

state standards by constructing their own meaning of ecological and organic based on reflexive civic processes and forms of participatory standard governance. This producer-consumer co-construction of standards in China's AFNs does not result from a 'weak state' acting in concert with agri-business to 'water down' standards (as in the 'organic lite' critique in the global north). Rather, the evidence suggests the opposite. In China, the state has acted to address widespread corruption and fraud in organic governance by enacting strong standards, in effect setting the bar ridiculously high with requirements for an inspection every time a seed is planted, knowing that farmers can't possibly comply. Citing examples of corruption, participants in these AFNs distrust the state's standard setting mechanism and the bureaucracy charged with its enforcement. Ironically, in what can be understood as a form of everyday resistance, the state's authoritarian, 'top down' approach to policy development is motivating the formation of nascent civil society action to develop standards in which producers and consumers can place their trust.

Again, we see the contradictory influences of culture. For both producers and many consumers, a pastoral idyll of traditional Chinese farming elicits a powerful set of ideas and nostalgia that shapes practices in these networks. This idyll draws on cultural representations of clean environments, harmonious relations with nature, authentic rurality and life at a slower pace. These are not *just* ideas people think about. They are ideas that shape practices and actions. The impact of the Chinese pastoral is revealed in the production practices adopted by CSA farmers and is a primary motivator for urbanites to connect to these networks as weekend farmers. In these networks, modernity is integrated with tradition, not positioned against it. Yet, ideals prove insufficient. Traditional practices are selectively adopted in these networks and most of the urban farmers are self-taught and lack knowledge and skills for strong ecological production. This skill deficit is exasperated by the state's focus on technological solutions and the absence of state or other civil society support and extension services.

However, CSA operators are not facing these educational challenges alone.

Organizers of farmers' markets, buying clubs, NGOs, some academics, as well as some CSA members are strong supporters of organic practices, and AFNs are working to fill this knowledge and skill void for themselves. On one hand, strong *guanxi* networks help these new

peasants draw training and support from multiple places. But, ironically, the urban producers seeking to re-cover farming traditions, don't seek advice from the peasant farmers working on their farms. A discourse of quality (*suzhi*) that portrays peasants as low quality and uncivilized exists in these AFNs and leads to peasant marginalization. So farming traditions are embraced, but traditional farmers are not.

8.4 Producer-Consumer Entanglements

In the context of persistent concerns with food quality, participants in China's AFNs are drawn into diverse complex interpersonal relations and reconnections. China's food safety crisis, and the AFNs responding to it, are situated in a cultural battleground, where complex pressures toward privatization, urbanization and the rise of consumerism are all encouraging a shift to a more individualist and disconnected society. Social disconnections from collectives and work units in the reform period have forced people to take on greater responsibilities and engage with the competitive forces of the market and assume greater risk. Yet, unlike in the global north, the persistence of state control in China means this individualization is only partial and the individual's rights and identity remain dependent on the state. In the resulting social anxiety about food, people are coming to China's emerging AFNs out of mistrust of the dominant food supply. However, instead of developing relations of care and reconnections with producers in these networks, consumers' motivation to care for themselves and their families, and procure healthy safe food, draws many of them into an ethics of care involving land. On almost all of the CSAs I visited, operators set aside a portion of the land, sometimes as much as one third of the farm, on which consumers and members can enjoy respite from the city and grow their own food. Motivated by the same rural idyll that influences the CSA operators, the construction of these 'weekend farmers' complicates the identities of a passive consumer and an autonomous producer in the marketplace and articulates an integrated and more holistic identity of 'co-producers'.

Yet, China's AFNs are caught in a space where these cultural conditions shape them in contradictory ways. On one hand, *suzhi*, a discourse about population quality, circulates in these networks and amplifies a distrust of peasant farmers. *Suzhi* stands in for social class and reflects the shifting power dynamics evolving within expanding capitalism. It exemplifies the

individualization and weakening of social bonds or 'untying' in the reform period and works in opposition to the egalitarianism of traditional Chinese ethics. However, while *suzhi* discourse strongly illustrates the growing individualism in contemporary China, and marginalizes peasants and perpetuates distrust in China's AFNs, *guanxi* relations have the opposite effect and help to build trust and social bonds in these networks.

Guanxi networks are evident in the extensive informal networks that link people in these AFNs. Despite the challenges with building trust in these networks, CSA operators, farmers' markets volunteers and buying club organizers seem undaunted and persevere with continuous activities and ongoing internet posts through which they reach out to consumers, seeking to build reconnections around traditional food skills and environmental issues. There is an impressive repertoire of festivals, workshops, events, conferences and other activities practiced in these AFNs, with the goal of building trust and reconnecting rural and urban, and producer and consumer. As with the weekend farmers, identities of producer and consumer become blurred and entangled for the AFN organizers as well. They first approach AFNs as consumers and their role gradually changes and they became producers responsible for growing food and reconnecting others with food.

In this context of pervasive distrust in food and state food governance, AFNs become 'windows' through which people can glimpse different kinds of reconnections and care ethics, that for many result in an entanglement of producer-consumer identities and a nascent civil society organizing.

8.5 Hybrids of Market and Civil Society

China's AFNs are not only sites of material transactions. They are also places where community is being built and the state is being challenged, although in subtle and covert ways. They are moving beyond market relations to work toward transformative change. These are networks where new 'food citizens' are being enacted, as these nascent networks begin to fill a civil society void and find opportunities to have influence on broader food system issues under the shadow of an authoritarian state.

While the growth of the urbanized middle class, and their pursuit of higher quality food, makes these networks and their acts of resistance possible, it also shapes them in a way that privileges entrepreneurs and subjugates peasants. There is a deep historical distrust of peasants in these networks raising fundamental questions about food justice. AFN organizers can be blind to privilege, and their charitable acts, though well intentioned, do little to challenge structural conditions that perpetuate peasant marginalization in China.

These are however reflexive networks, struggling to address these food justice problems through engaging diverse interests in open processes. In the context of pervasive uncertainty, these networks are developing a broad repertoire of everyday resistance strategies such as, bloggers employing sarcasm in their use of state rhetoric and slogans, buying clubs avoiding business registration, farmers' markets evading bureaucratic requirements, and peasants pilfering food they believe is rightfully theirs. These mundane forms of resistance flourish in a context where the boundary between what is permitted and risky is constantly shifting. The actions of China's AFNs remind us that hegemony is never total, and their repertoire opens up our understanding of 'opposition' to reveal subtle yet powerful forms of everyday resistance around food that occupy the large space between compliance and overt defiance.

This everyday resistance is directed at the state and comes in the form of seeking, primarily, better rules and better enforcement regarding food safety and civic development of food quality standards. This is not the same anti-globalization resistance that motivates AFNs in the global north. Indeed, here in a context where the memory of state-regulated food choices is still fresh, AFN organizers and participants welcome the diverse food choices that China's globalization is bringing. They have benefitted from China's 'reform and opening', and there seems to be, at least in the short term, a disarticulation between the problems that prompted the formation of these AFNs (e.g. food safety crisis, ecological degradation, loss of traditional farming) and China's food globalization.

Regardless, through forms of everyday resistance China's AFNs are acting to secure control over food for themselves, in the context of top down state policy. They have buffered

themselves from the uncertainties of a global food system, as well as the uncertainties of unsafe domestic food supplies, by establishing direct-to-consumer modes of exchange that emphasize livelihoods, connections and ecological relations. They are acting to take back control of food quality standards and re-kindle traditional practices. Further, in front of state's opposition to alliances that focus on demanding rights, China's AFNs have built trans-global informal, *guanxi* relations. A predisposition toward informal *guanxi* relations aids the initiators in these AFNs in bridging scales and drawing extensively on both personal and electronic networks. These networks are the foundation for AFN resistance, and in a context where information is highly controlled, they provide access to information as well as the means for information distribution and organizing.

8.6 How are these findings instructive?

As an early exploration into alternative food relations in an authoritarian state context, these findings move theorizing forward on alternative food relations as a global phenomenon. As a 'first look' however, the research raises more questions than offering answers and suggests some discordant concepts with current AFN theoretical assumptions which need to be followed by future research.

8.6.1 Land and Agrarian History Matter

AFN theorizing and case study work is drawn almost exclusively from histories of private land relations and the resulting path of firm and farm consolidation, to which many AFNs respond. Examination of AFNs in China however, lays bare the fundamental role that agrarian history and land tenure has in shaping these alternatives. Public land ownership, where entrepreneurs need to negotiate for land access with peasants who hold land rights complicates land-labour relations that underlie global north AFN theory and further examination of economic relations in different land tenure contexts is needed.

8.6.2 New Politics of Local-Global

An intriguing aspect to this research is that throughout my interviews, the concept of 'local food' was never mentioned. This contrasts with action and research in global north AFNs, where 'the local' is either reified an/or critiqued. While the AFNs I examined are all

procuring and exchanging local food, they are neither pursuing a local *ideology* that reifies scale, nor are they local out of necessity. There is a pragmatic, rather than utopian understanding of place in these networks. In contrast to defensive localism, and perhaps influenced by China's 'opening' experience, there is a strong orientation to search for knowledge, experience, and information from beyond China and re-mix these with 'Chinese characteristics'. The ways in which China's AFNs practice a politics that is rooted in place but also looks outward supra-nationally warrants further research.

8.6.3 New Spaces of Resistance

As China's AFNs join others from the global north in 'moving beyond the market', they reveal new ways to think about resistance. They challenge assumption of an independent civil society sphere where non state actors can gather, discuss and challenge policy, that underlies AFN theorizing. The examples described here call for an extension to the ways in which AFN scholarship understands citizenship, and suggest that actions for the common good can take place at all scales, from the personal to the global, as well as through diverse styles from the overt to the everyday. China's AFNs reveal that hegemony is never total. Even in the absence of organized civil society and in a context of pervasive uncertainty, resistance finds its space. The everyday resistance repertoires detailed here suggest that space, between domination and overt defiance is large, and worthy of further exploration in different contexts. It could be fruitful to bring theories of everyday resistance into global north AFN theorizing.

8.6.4 Opening Up the Black Box of Agrarian Myths

A cultural imagery of the rural idyll is a strong motivator in China's AFNs. Certainly 'American pastoralism' is also powerful trope in North America, with deep cultural roots, with an imaginary of a 'yeoman' farmer in touch with nature, working a small plot on the frontier, rejecting industrialism and pollution (Press & Arnould, 2011). Indeed these ideals motivated the 'back to the land' movement in the 1970s so we know they can be powerful forces that engage people. At the same time, however, such romanticism can mask contradictions and inequities. In the rural imaginary that attracts us to the CSA for example, we might disregard its middle class bias, and social exclusion. Opening up the black box of the rural idyll in the global North and how it intersects with political, economic and environmental conditions, in

particular social justice issues and land tenure, could be a fruitful line of research contributing to how we theorize alternative food relations. Can such imagery be a transformative force?

This research represents a first account of producer-consumer, co-constituted food provisioning and procurement networks emerging in China's peri-urban areas. As a 'first look' I have favoured breadth over depth in my choice to use four different lenses to examine the alternativeness of these AFNs. My findings reveal economic, ecological, interpersonal and political diversity, and call for further investigation of these dimensions. Further, I have identified a set of 'Chinese characteristics' that shape these AFNs along those dimensions. These characteristics are informed by both political economic as well as cultural theory and include economic, environmental, cultural and political conditions. The findings give us a glimpse at AFNs beyond the global north, but also serve as a mirror to reflect some discordant concepts and theoretical assumptions that need further investigation. This 'first look' at these networks sees state and capital dominance matched by possibilities or 'openings' that start to reveal how different production and consumption might be arranged.

"In the beginner's mind there are many possibilities, in the expert's mind there are few." Zen master Shunry Suzuki

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Appendix A - Instruments Interview Guide

Tell me about your farm - where is it? How big is it? How long have you been farming?

关于您农场的信息:地点、面积、经营多久了

How do you practice ecological agriculture? Tell me a bit about some of the farming practices you use? For example, how do you build fertility or control weeds? Do you use cover crops and rotations? How do you manage fertility? What are some of your farming challenges? What is your experience with the Chinese organic standards and the certification process?

您如何开展生态农耕?能否告诉我一些您的耕种措施?例如,如何保肥控制野草?您采用间作套种轮作吗?如何管理费里?

您遇到的挑战有哪些?您对中国有机标准和认证过程有什么看法?

Can you tell me about how you started selling directly to consumers like this? Why did you start selling food direct to consumers instead of through other traders and middlemen? Is this the only way you sell food - what other channels or ways to you sell your products?

能否告诉我您是怎么开始与消费者建立直接销售关系的?为什么您开始直接销售给消费者而不是通过其它的中间商?这是您唯一的销售方式吗?您还有什么其它渠道或方式?

What are the benefits of selling directly to consumers and what are the challenges? Is this way of selling becoming more common among farmers? Why/ Why not? Is this way of selling more or less profitable than other arrangements?

直接销售给消费者有什么益处?面临哪些挑战?这种方式是不是正在农民中间变得流行?为什么(不)?这种销售方式比起其它方式收益更高吗?

What is the place of CSAs in China's food system overall? What do other farmers you know think of this approach? What do officials think of this approach? What reaction is there generally?

社区支持农业在中国的食品系统中的整体地位如何?你认识的其它农户怎么看待这种模式?政府官员们如何看待它?整体说来社会媒体对这种模式有什么反应?

Can you tell me a bit about the consumers/members who buy food from you? In your view, what do you think consumers are looking for - why do they buy from you instead of going to a supermarket? What other opportunities do you see for yourself?

能告诉我一些您的顾客的情况吗?在您看来,消费者们在寻找什么?他们为什么从你这里购买食品而不是去超市?您还有哪些销售产品的方式或提高农场收益的方式 (比如旅游)?

What are the roles of the local and state governments in supporting producers? What are your opinions about government involvement in ecological agriculture? How is it helping you and how is it presenting difficulties?

How important is trust [or reputation?] in these food transactions? What would happen if the food in a buying club or CSA like this was found to be unsafe? Have you thought about that before?

在这些食品交易中信任或者名誉有多重要?如果类似的健康采购团或社区支持农业的产品被发现是不安全的,意味着什么,怎么办?您以前考虑过这个问题吗?

What about competition - do you ever feel like you are lowering your prices because of other farmers - how do you determine your prices? Does this affect your production?

竞争: 您有没有因为其它农民的竞争想要降低价格?如果决定价格?竞争会影响您的生产吗?

CSA Survey

农场调查问卷

您好!我叫Theresa

share?)(可多选)

Schumilas, 是一名加拿大滑铁卢大学在读博士研究生, 与Steffanie

Scott博士一起从事加拿大和中国CSA农场的研究。我本人也是一个CSA农民,在加拿大滑铁卢市郊区拥有一个小农场。请问您能否帮我完成一个简短的问卷调查?当然,您有权决定是否参与调查。您和其他参与调查的人所提供的信息都将是保密的。您的名字也不会出现在我的论文、报告或此研究所发表的任何文章中。

您的姓名(Name):
您农场的名字(Farm):
您农场的地址(address):
您的农场是哪一年建立的?(establish year)
您的农场有网站/博客吗(website or blog)? 若有,请提供名称,我们希望能关注你们的网站/博客
您的会员如何支付费用 (可多选)(How do people pay for their shares/produce?): □提前预付季度定金(In advance) □按周付款(weekly) □其他方式,请描述(other):
配送份额中的蔬菜种类如何确定? (可多选)(Who chooses the foods that are in the share/delivery?): □农场根据当季产出决定(based on what is available on the farm)
□消费者(会员)从农场提供的蔬菜种类列表中选择(Consumer chooses from a list provided) □其他方式,请描述 (other):
您平均每周配送多少个份额?(number of shares) 夏季(summer) 冬季(winter)
您的会员如何获取他们的份额?(How do members/consumers get their

□他们到农场来取(pick up on the farm) □我们配送到家(home delivery)				
□他们到其它地方(如市区的配送点)取 (at other locations)				
□其它方式,请描述(other):				
What is the cost for different sizes of shares? (not translated - we have been getting				
this directly from websites)				
你人去可必以被告心住世帝中区子中之孙子目2000 1 1 1 1 0 0				
您会在配送份额中代售其它农场或农户的产品吗? (Do you buy products from off the form?)				
off the farm?)				
□从来没有(never) □偶尔, 但不经常(Occasionally - but not usually)				
□经常,请注明您常从别处购买的产品类型Often - specify products you usually buy from other farms:				
How many mu? 您的农场(farm)共有亩(mu in total),其中亩用作CSA(社区支持农业)生产(mu for CSA),亩大棚(greenhouse)				
您农场的产出有哪些?(可多选)(grow/raise on the farm)				
□蔬菜(vegetables)□水果(包括果树)(Fruits (including fruit trees)□猪肉(pork)□牛奶(cows for milk)□牛肉(beef)□羊肉(goats)□鸡肉(chicken)□鸡蛋(egg)□谷类和豆类(小麦、大米、玉米、燕麦、小米、				
大麦、黄豆等)(grain and beans)				
□牲畜青饲料(Forage or pastures for animals)□蜜蜂和蜂蜜(Bees and honey)				
□其它,请注明(other):				
除了给会员配送以外,您还有别的销售渠道吗?(可多选)where else do you				
sell farm products?				
□在农夫市集销售farmers markets □通过消费者采购团销售buying clubs				
□在农场的商店销售in a store on the farm □卖给小商店或饭店 to small				
stores or restaurants				
□卖给政府部门、企业、学校、医院等机关单位cafeterias in institutions				

	□其它,例如other:				
vegetable	农场还举办其它活动吗?(可多选)What other activities go on at the farm? □把土地出租给消费者(劳动份额)(Plots for consumers to grow their own es)□开办农场餐厅(Restaurant) □举办关于健康生活、食品、农业等的讲座Workshops				
	举办娱乐活动Exercise activities				
	□其它,请注明:other				
	您的农场通过了有机认证吗?certified organic or not?				
	□是的(yes) □没有,也不打算认证(no, and not				
planning	to)				
organic)	□没有,但是目前正处在有机转换期(No, but I am currently in transition to □我将来会做有机认证 (I am considering certification for the future)				
	什么原因促使您建立了您现在的农场? (请选出对您而言最重要的三个原因)				
(Why die	d you decide to begin a CSA farm?)				
	□我希望能帮助小规模农民们,提高他们的收入(to help small peasant farmers)				
	□我担心农民们的健康状况(由于农药的大量施用)(concern about farmers'				
health)					
	□我担心消费者们的健康状况(由于农药残留)(concern about consumers'				
health)					
	□我关心环境问题,例如水和土壤资源的退化和污染(environmental problems –				
like wate	r and soil degradation and contamination)				
	□我担心自己的健康(食品安全或环境污染)(concern about my health because				
of food sa	afety and environmental pollution)				
	□我希望能和志同道合的人建立更紧密的联系(to connect with others who shared				
my conce	erns)				
	□我认为这是一个很好的商业机会(a good business opportunity)				
	□朋友或同事说服我尝试开办农场(A friend/colleague convinced me to try it)				

On the paper survey we had people give us detailed information on workers – but it was really complicated and I don't think will work over the phone. So we should just ask: How many people are paid to work on the farm?			
您家庭收入的百分之多少来自于您的农场?what percentage of your household			
income comes from your CSA?			
□不到25% □26-50%之间			
□51-75%之间 □76-99%之间			
□100% - 农场收入是我家庭收入的唯一来源CSA is the only income source			
您如何描述您的农场和农产品类型?how they describe/label their practices			
□有机农业organic agriculture□绿色农业green agriculture□生态农业ecological			
agriculture□自然农法natural farming□永续农业permaculture□生物动力学农业biodynami			
agriculture			
□其它: other			
非常感谢您的参与!如果您想获得此次调查的结果,请留下您的名字和电子邮箱:			
姓名name Email:			

□其它原因: (other reasons)

Farm Observation Checklist

Farmstead and	Hedgerows? Infrastructure?	
Landscape	Insectaries? Equipment? Forests?	
	Pastures?	
Crops and Cropping	Crops grown? Inter planting?	
	Cover crops?	
Soil and Soil Building	Compost and/or manure use &	
	sourcing?	
	Other fertility management?	
	Fermentation pits?	
Livestock management	Grazing system?	
	Feed source?	
	Manure management?	
	Heritage breeds?	
Seed Saving and	Use of untreated seeds?	
Sourcing	Seed saving?	
	Heritage varieties?	
	Sourcing?	
Water Management	Rain collection?	
	Irrigation systems?	

Appendix B

List of Bloggers

10 Bloggers Followed for 4 months – December 2012 – March 2013 *- individual was also interviewed

Identifier	Identity	Description
BCB1*	Beijing consumer	Posts are mainly about the vegetables they source for the buying club, sources of organic products, baby care and education experience and environment-related risks and environmentally-friendly actions and products
FS1	Shanghai peasant farmer	Posts frequently relate to his feelings, thoughts and reflections on farming, including obstacles and restrictions
FCSAJ1*	Changzhou CSA operator	Many re-posts, but few original posts – primarily news about the CSA
OG1	Guangzhou CSA operator	Pioneer CSA entrepreneur in south China - posts frequently related to pollution and environmental issues, farm tourism, and new cow share business
FCSAB4 *	Beijing CSA Operator	Pioneer CSA farm in Beijing – posts about the CSA farm, current events and issues,
FCSAB6a	Beijing CSA Operator	Posts about the farm, shares, new projects and recruitment, current events, sharing info from other CSAs
FCSAB6 *	Beijing AFN initiator	Posts with updates from CSAs outside of China, key documents, raises questions for discussion
FMB	Beijing consumer	Updates on the farmers market
FMB1*	Beijing AFN initiator	Shares news re: fair trade, and alternative food issues from outside China, initiates on-line discussions, debates, often about her own lifestyle choices
IB1	Beijing CSA operator	Advocate of organic agriculture, postings frequent relate to economics of the CSA farm