

THESIS

THE SOCIOLOGY OF LOCAL FOOD AND TRANSFORMATIONAL ENGAGEMENT:
A CASE STUDY OF THE RISE OF THE LOCAL FOOD MOVEMENT

Submitted by

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ABSTRACT

THE SOCIOLOGY OF LOCAL FOOD AND TRANSFORMATIONAL ENAGEMENT: A CASE STUDY OF THE RISE OF THE LOCAL FOOD MOVEMENT

This qualitative ethnographic case study of the local food movement in Larimer County, Colorado is an examination of the epistemological nature of how key players like chefs, farmers and local food advocates create and reinforce the local food movement. This thesis examines sociological process, and the micropolitics of the community of local food players, illustrating the progression of civic agriculture. I describe how transformative learning, or the process of changing a frame of reference, is key to understanding the capacity of local food movement actors to address complex systemic issues. The analysis reveals how three waves of new local hands-on projects created informal learning situations, increasing systemic and global knowledge of the food system, and how new social networks settings led to civic engagement. Cycles of accretionary knowledge and transformative learning indicate that the performative nature of civic engagement was key to the rise of the local food movement. This research offers guidance to professionals, academics and associations that represent local and regional food systems, in regards to the important role of learning sites and new social networks and that are necessary for personal transformational change and engagement. This study also lends empirical evidence that civic engagement necessitates systemic level thinking, which can inform future criteria and assessments of food movements. Overall, this research demonstrates a framework to analyze movement capacity via the waves of development, and offers a perspective on the rise of the local food movement that provides a more complete explanation of why and how food activism becomes a salient personal motivator that results in aspects of civic agriculture.

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Chapter 1: Introduction

Food can be a powerful site for transformative participation. The recent rise of the local food movement in the US offers a particular opportunity to examine the beginning process of social change, epistemology, and transformative engagement. National attention regarding diet related diseases and an ever-increasing consumer interest in knowing the farmer who grows the food and cares for the animals we eat all indicate a focus on local food and farming not experienced since the Victory Gardens of World War II. Blogs, reality shows such as the Food Network, and non-fiction books tracking the experience of intrepid eaters and cooks have become all the rage. *The New York Times* food writer Michael Pollan became a celebrity and a source of controversy for writing frankly about the broken U.S. food system, proposing alternative agriculture and often local ways to change the way we produce food and make food choices. Books about the process of discovering how to eat locally and grow your own food top national best seller charts and win literary awards. As journalist Kim Serverson reported (2006, D2), "What's changed is the relevance of local and organic produce. It is no longer an elitist thing." Do It Yourself (DIY) food projects abound: homemade and handmade food, gardening, preserving, neighborhood chicken coop tours (by bicycle), farm internships, crop mobs and many other ways to directly connect with the source of food are all hot topics in the social and national media.

As evidence of the wave, "locavore," a person who strives to source and eat as local to their home as possible, became the word of the year in 2007. By 2008, when this research began, Community Supported Agriculture (CSA) farms offering seasonal shares of farm products to members sold out of shares in record time in Colorado. Organizations like LocalHarvest.org, the premiere online sales site for direct market farmers also reported record national CSA sales that year. Unprecedented demand was reported by organic seed companies, and some sold out of supply. Farms reported an incredible growth in interest in their direct market products, and farmers markets showed strong growth in number and sales (2007 USDA Agricultural Census). According to the Northern Colorado Regional Food Assessment (2010, 36), "the USDA estimates that, as of August 2010, the total number of farmers markets in the nation had reached 6,132, a 40 percent increase from August 2006." Chefs and restaurants increasingly receive accolades and draw customers based on the amount of local food they feature on menus.

Business incubators, NGO projects related to new farmer training and value added processing for farm products are also en vogue as regional economic development strategies. Community groups collaborate with food banks and nutrition departments to address the health effects of food, and host farmers markets in hospital parking lots. In addition, during this surge, the USDA declared a need for 10,000 new farmers, and all USDA offices globally now host “the people’s gardens”. The number of start-up direct market farms continues to grow each year, as does the number of small farms (Lomax, Alyce. 2008). Farming is a hip profession amongst the 20 and 30-somethings, leading to the formation of the Greenhorns, a land-based non profit for young farmers across America. Severine von Tscharner Fleming, a 25 year-old white woman farmer from upstate New York who founded the Greenhorns, made a film of the same name about young farmer values, toured it around the country, and then established the first National Young Farmer’s Coalition, advocating for policies that support agrarian needs. This quote from a 2008 *New York Times* article aptly sums up the multi-faceted drive of the locavores who found themselves at the crest of this alternative food movement as young farmers:

Steeped in years of talk around college campuses and in stylish urban enclaves about the evils of factory farms (see the E. coli spinach outbreaks), the perils of relying on petroleum to deliver food over long distances (see global warming) and the beauty of greenmarkets (see the four-times-weekly locavore cornucopia in Union Square), some young urbanites are starting to put their muscles where their pro-environment, antiglobalization mouths are. They are creating small-scale farms near urban areas hungry for quality produce and willing to pay a premium (Salkin, 2008).

The academic conversation has shifted as well. While the study of food and eating is has a long history, it has become noticeably more important over the last few decades, particularly within sectors like sociology, anthropology, political and agricultural economics that traditionally study the topic. For example, Mintz and DuBois’ (2002, 111) essay “The Anthropology of Food and Eating” reviewed the staggering increase in food studies published after 1984:

We contend that the study of food and eating is important both for its own sake since food is utterly essential to human existence (and often insufficiently available) and because the subfield has proved valuable for debating and advancing anthropological theory and research methods. Food studies have illuminated broad societal processes such as political-economic value-creation, symbolic value-creation, and the social construction of memory. Such studies have also proved an important arena for debating

the relative merits of cultural and historical materialism vs. structuralist or symbolic explanations for human behavior, and for refining our understanding of variation in informants’ responses to ethnographic questions.

More of the choir singing about the issues of the food system has led to a broadening of interdisciplinary interest, particularly from the fields of planning, community and environmental studies and public health. There has also been a palpable shift toward the study of local knowledge, values and practices surrounding growing, seeking, preparing and eating regionally produced food (Carolan 2011; Starr 2010). However, research on the epistemology of sustainable agriculture, or the study of how we know what we know about food, has mostly focused on the aspects of the movement related to alternatives to chemical agriculture technologies, including new production techniques, marketing niches, and food security. Far fewer studies exist detailing the sociological and epistemic phenomenon that generates social networks around food and weaves the connected fabric of social change for local food movements. Similarly, there is a dearth of literature relating the process of transformative learning, “a process that represents a change of consciousness in that it changes how the learner perceives and makes sense of the world” (Kerton and Sinclair 2010, 401), and the resulting epistemic practices that emerge in the creation of an alternative food movement.

This thesis will explore the rise of the local food movement within the cultural and historical context particular to the case study area. This ethnographic research examines a region of Colorado known as the Front Range and an emerging interest in the culture of agriculture, a claiming of new identities within the food system, and an embedding of learning situations and relationships. The data herein represent the evolving local expression of a (sometimes unconscious) resistance to globalization manifest in desire for sustainable agriculture, rural and urban social justice, consumer and environmental health, and the various and particular answers to the question “how is my food produced?”

Perspectives on Food Movements

The development and concept of sustainable and alternative agriculture grew out of the political and cultural space carved by new social movements of the 1960s, critiques of the environmental impact of chemical-based agriculture, such as Rachel Carson’s *Silent Spring* (1962), and the resultant rise of environmental awareness (Vos 2000). Particular to agriculture, Wendell Berry, farmer, writer and the leading agrarian voice in America at the time, chided the economic drive of the commodification of food,

advocating for a transformation of the economic system toward a values and agrarian based economy, “where producers and consumers are neighbors” (Berry 2001). Berry and many of today’s most well known sustainable agriculture advocates represent a resurgence of Jeffersonian agrarian and populist ideals, in defense of family farms, and a drive toward an agriculture and an economy that is embedded in nature and the culture of communities. The collective social interactions and collaborations around alternative economies as forms of markets can be summed up as the process of “knowing and growing food” (Goodman and DuPuis 2002). DuPuis and Gillion (2009, 45) further illuminate the emerging breadth of “the market” in terms of studying food or working on food system issues:

“[...] ‘markets’ include the entire field of actors, objects and ideas that affect the exchange of commodities along the value chain, including government (both as regulators and rural development policy makers), NGOs, businesses, and citizen’s lobbying groups, and consumers, organized or not as well as ideas about what is a ‘good’ economy, a ‘good’ life and a ‘free’ market.

This broad understanding of the market is important because, for many years, the focus of the sustainable agriculture movement was to parse specific aspects of the sustainability of production, such as low or no chemical inputs, stewardship or food sufficiency and justice (Allen and Sachs 1993). These politics of engagement resulted in the late 1970s formation of many activist-based organizations focused in niche areas of sustainability, and then led to a continuation of those organizational and academic silos for more than two decades (Ridenour-Tanaka 2006). Circumventing the politics of farm worker exposure to pesticides, health, safety, and social justice, the majority of the sustainable agriculture movement sidelined these more controversial aspects in favor of the critique of chemical intensive monocropping and the mainstream acceptance of organic certification (Campbell, D. 2001; Allen 1999). The literature indicates that along with the achievement of 30 years of research showing organic and sustainable agriculture production success, the broader social movement agendas originally included within sustainable agriculture, such as human rights and environmental justice were compromised (Guthman 2004; Allen et al 2003; Campbell, D. 2001).

Is Local Food a Movement?

Today, the former sustainable agriculture and organic movements have been nearly subsumed by the local food movement and a national turn away from global, corporate agriculture and industrialized food. As the original foci of sustainable agriculture began to be addressed by mainstream agencies, research entities and non-profit organizations, the main thrust of the alternative food movement over the last dozen years has been to focus on increasing economic viability via direct marketing. The local food movement, also known as the practice of “civic agriculture”, aims to link local or regional markets directly to consumers, and represents a divergent trend in the US food system (Lyson 2004; Lyson and Guptil 2004; Delind 2004).

Alternative food movements aim to create change through alternative markets driven by consumer demand, and “marketing linkages play a major role in the characteristics and viability of farms, underscoring the persistence importance of place” (Lyson and Guptil 2004, 371). Local and regional food systems, as an alternative to the existing industrialized system, are thought of as a way to increase product accountability and inhere a responsive sensibility unique to the characteristics of local communities (Delind 2002; Lyson 2000; Lyson and Guptil 2004). Rather than focus on a specific type of alternative to the current system, local food campaigns tend to emphasize consumer empowerment and choice in the market, such as shopping at farmers’ markets, joining Community Supported Agriculture (CSAs), purchasing from farm stands, dropping the name of the farm over dinner, and seeking out independent shops and restaurants that sell organic and locally produced food (Allen and Hinrichs 2008). More comprehensive efforts to develop demand for local food and a viable alternative market is indicated in the rise and success of Buy Local labels and direct marketing to chefs or via farmers markets (Allen and Hinrichs 2008; Ostrom 2006).

Meanwhile, most Americans likely have not noticed the significance of the changes validating the rise of the local food movement enacted by USDA Deputy Agriculture Secretary Kathleen Merrigan. However internal and politics-based it may be, the USDA’s emphasis and interests have begun to reflect the national turn toward the local. Deputy Secretary Merrigan, a former Tufts professor, who previously served at the USDA and helped to win the passage of the National Organic Rule, was appointed in 2008. Since her appointment, the “Know Your Farmer, Know Your Food” Team (KYF2), an internal

reorganization of the USDA, has been the largest non-programmatic and non-budgeted change within the USDA in recent memory, structurally creating a home for community food security, farm-to-school, and regional farmer support projects. (Note: know your farmer, know your food language is in continuity with the local and direct market movement, and similar to the “farmer with a face on it” that arose in Japan and Switzerland in the 1960s, which resulted in the Community Supported Agriculture model). Intending to respond to critiques that the USDA ignores small farmers and that USDA funded projects tend to be siloed, the KYF2 Team created a database of all national USDA projects and statistical data related to local and regional food systems are now publicly available on the interactive national “Compass Map” (<http://www.usda.gov/maps/maps/kyfcompassmap.htm>). Additional outcomes of the work of the KYF2 Team are the appointments for USDA National Director of Farm-to-School program (established in 2012), and the Beginning Farmer Rancher Program (established in 2011). The local food movement is now officially on the USDA map.

Thirty years ago, the local was notably characterized as the main aspect of the food system that has yet to be integrated, consolidated and fully penetrated by capitalism (Mann and Dickenson 1978). Today, though, one of the most common assertions about the alternative food movement and the local turn is that it is a backlash against the manifestation of corporatization, and the increased invisibility provided by the commodity chain, which obscures the role of individual actors and community relationships (Winter 2003; Ostrom 2006). Local and community based food systems are the next generation of response to increasing food system instability, and a reaction to industrialization and globalization, as well as a backlash against government regulation of organic (Ostrom 2006; Winter 2003; Delind 2005; Wilkins 2005). Three decades after Mann and Dickenson, Starr (2010) notes that the local food movement now aims to move beyond commodification.

The “cosmology” of the local food movement is food as community (instead of commodity). The movement aims to build “local food systems”, based on ecological analyses such as watersheds, sustainable farming, seasonality, heritage of biodiversity, and cultural preferences. Food is transformed from a commodity to a pleasure made possible by human relationships, the limitations/specificities of an ecology, attentive husbandry of biodiversity, and responsible global citizenship (Starr 2010, 484)

In addition, food labeling initiatives such as Fair Trade and humane certification attempts to address globalization and distancing issues, contributing to what Ritzer (2004) has termed “glocalization,”

or the convergence of various movements across the world which seek to achieve socially just, sustainable practices of production. As consumers attempt to regain control of the industrialized system driven by globalization, a reflexive eater is re-connected to the food system via the “trust” of face-to-face interactions of farmers’ markets and CSAs and move into the role of key actor to create the idealized food system (Carolan 2006; DuPuis 2000; Levkoe 2005). While Starr (2010, 483) notes there is a distinct lack of organization in the local food movement, the *social* movement elements of local food invite “people to practice their values (reducing footprint, supporting farmers, teaching children ecology) and participate in the emerging ‘we’”.

Definitions of Local

Conceptualizing “What is local?” for the participants took on a quantifiable nature at the beginning of the food localization movement, as “food miles” became the center of conversation regarding food’s carbon footprint. Press and advocate groups repeatedly reported 2001 data from the Leopold Center for Sustainable Agriculture showing that the average food item travels 1500 miles from farm to plate (Pirog and Benjamin 2003). Food miles became a common way to explain a complexity of issues. The trend later evolved toward a generalization of what is appropriate for the region’s existing food production, and within the circle of relationships. For example, the San Francisco Bay Area and its surrounds is an example of small, diverse farms supported by a multitude of farmers’ markets and direct market outlets, where commerce is driven by local knowledge that a reasonable distance for a farmer to travel to reach dense market outlets is approximately 100 miles. On the other hand, author Barbara Kingsolver (2007) describes eating homegrown and local food in Virginia as what can be found within a day’s leisurely drive. Marcy Ostrom (2006) found that three fourths of farmers and consumers in Washington State think of ‘local’ as scalar; most people conceive local as closer: within their county or the nearby county. A 2010 household telephone survey conducted by Applied Research Northwest, part of a consumer behavior change campaign I managed in Whatcom County, Washington, also corroborated Ostrom’s findings. Increasingly savvy locavores also value carbon footprint data, local knowledge and appropriate use of land, resulting in far more flexible definitions of what is local, often also based on crop perishability, local food system infrastructure and production requirements. Ostrom further argues that local is best

understood as a community development framework, based on a sense of place. “It is through building common ground among consumers and farmers based on their identification with a ‘locality’ and their common interests that the social capital needed to address the very real, practical barriers to local food distribution can be addressed” (Ostrom 2006).

Organizers and individual locavores, who often came to the definition based on food miles (e.g. the 100-mile diet) are progressively more flexible and reflective about the definition of local, proving Delind’s (2006) argument that subjectively, place and local are not the same. In other words, defining what to include in the concept of local is not the key element of the movement. Using miles or distance as a descriptor the values of ‘local’ is “too superficial, too quantifiable for nurturing or expressing this deeper commitment”. Situating in place, Delind writes (2006, 134) is about the “living contexts and we learn to engage with the spaces, rhythms, smells, tastes, colors, textures, periodicities of our food and the elements of daily life create the collective process that makes up ‘local’”. DuPuis and Goodman (2005, 364) further note that in a localized food system producers are encouraged to build new networks with each other, social relations with consumers and engage in “constructions of quality that evoke ‘locality / region or specialty and nature,” and that such qualities become a source of value for the consumer.

The Local Trap

Popular critiques of local food being elitist and exclusionary are similar to those of the organic movement. Food activism, with its focus on the consumer and individual action of “vote with your fork,” has received criticism for its inability to effect change at the sociological, group or systems level (Hassanein 2003; Delind 2006; Delind 2010; Click and Ridberg 2010). DuPuis and Goodman (2005) also are critical of the emphasis on local, particularly the xenophobic undercurrents that promote a localized system that may not inherently exist without first making major changes in infrastructure and other resources, while at the same time promoting a distrust or apathy toward those outside the bounds of what is “local”. In addition, policies, and the cultural power contexts of the local system are often limited by existing and often cemented constructs of the industrial and global system (DuPuis and Goodman 2005). Only by examining and engaging the underlying politics of localization, with its implied ethnocentrism and implicit distrust of the distant, foreign (food shed, season, or cultivar), DuPuis and Goodman argue (2005,

365), can this social movement reach the goals of an “open, inclusive and reflexive politics of place”. Hinrichs (2003) and Allen et al (2003) also note the valorization of local can reinforce existing systems of inequality or mask unsustainable production practices. Some claim that “local only” food celebrations have created blinders to the often limited ability of the smaller-scale farms to channel food production flows at a scale or volume that can reach the goal of feeding whole communities and displacing the regional and local economy “leakage” created by imports (Hinrichs 2003; Shuman 2006).

From a planning and smart growth perspective, Born and Purcell (2006) further the critique that local-scale systems are only assumed to be inherently more desirable than other food system structures, and this focus on the distance scale (or how local is local) can have negative consequences. With an inherent focus on social constructions, they argue, social scientists have too often fallen into “the local trap” of a priori assumption that local is better ecologically and will create a re-democratization of the food system (Born and Purcell 2006). In relation to this case study, Born and Purcell (2006) emphasize that the limited research and analysis on the outcomes of the turn toward the local food movement do not yet justify such celebration of geographically bounded and small-scale local food systems. However, they suggest:

...the best way to think about scale is not as an ontological entity with particular properties but as a strategy, as a way to achieve a particular end. Thus, localization is a scalar strategy that can result in a range of outcomes—for example, social justice, oppression, food security, ecological destruction—depending on which agenda is advanced as a result of the strategy (Born and Purcell 2006, p. 197).

Additionally, Johnston (2007, 231) notes that without changing path dependency and the positive feedback of returns for institutional reinforcement of the current industrial scale and international system, localization is not likely to vastly change the embedded inequities and “ideological contradictions that privilege the goals of consumerism over the goals of citizenship”. The conceptualization of local in and of itself does not transcend the territories of politics, markets and economic struggle, nor does the rise of the ethical shopper based on “an ideology of citizenship” (DuPuis and Goodman 2005; Johnston 2007, 247). Furthering the critique of the local trap, Born and Purcell (2006, 202) state that “local as an end, for its own sake, is merely nativism, a defensive localism that frequently is not allied with social justice goals”. However, DuPuis and Goodman (2005, 369) offer this insight, “How to make localism an open, process-based vision rather than a fixed set of standards, is one of the major challenges the alternative food

systems movement faces today". Notably, the organic movement focused on standards, as have many other aspects of the alternative food movement. These questions of the process, vision and research on the local food movement will be explored further with this research.

Civic Engagement

Whether the change in the way people engage in the food system is place-based, a reactionary element to globalization, a xenophobic focus on local only, or a deepening continuation of the extant consumer-as-change-agent, the source and substance of the surge in engaged players engaged in the local food movement is so far unexplored. While a focus on the local alone finds localists "glossing more exacting social and environmental criteria and begging questions of scale" of an alternative food system, DuPuis and Goodman (2005, 368) and Hinrichs (2003) note the ambiguities often promoted along with local. In critique they note that a more "inclusive and reflexive politics of place would understand local food systems not as local 'resistance' against a global capitalist 'logic' but as a mutually constitutive, imperfect political process in which the local and the global make each other on an everyday basis" (DuPuis and Goodman 2005, 369). Goodman and DuPuis indeed describe a rich terrain so far unexplored by local food systems researchers. Similarly unexplored has been how people engage in "civic agriculture," a catch-all for the process of the localized alternative and organic markets developed in Thomas Lyson's (2004) book of the same name. Delind wrote the following summary definition of the broad term:

Collectively, the term "civic agriculture" has been coined to identify the many, creative, market-based arrangements – CSAs, farmers markets, coops, u-picks – that have recently appeared (or reappeared) within communities and neighborhoods across the country. Typically, these are characterized by the direct, face to face interaction of area farmers, business owners (e.g., restaurateurs, dairies, chefs), and residents, each more keenly aware of their food supply and their mutual dependence (Delind 2005, 123).

Delind's concept of civic agriculture captures the drive of the local food movement, and offers a framework for understanding the process of engagement in alternative agriculture. Related, in a study of knowledge exchange in the sustainable agriculture movement, Hassanein and Kloppenburg (1995, 723) found that

"...support from a broader social movement appears to be vital to the success of alternative farmers. Social movements intend to promote or resist social change through collective activity

generally occurring with some degree of organization and continuity outside existing institutional channels”.

Notably, the continuity of the local food movement in the case study area of Larimer County could be characterized as a social movement, but it appears to be without much continuity or organizational guidance. Viewed from the outside, the local food movement appears at best to be an incipient re-localization movement with a focus on economic development. However, this case study of the epistemological process and micro-politics of the community of local food players reveals a rise of community participation in an alternative agriculture, which “is a dynamic and interactive process that relies on civic engagement” (DuPuis and Gillion 2009; Kloppenburg 2000; Hassanein 1999). Given that the success of many local food campaigns (e.g. Iowa-grown and Food Routes’ Buy Fresh, Buy Local labeling and marketing campaigns) are also due to how knowledge is shared amongst social networks (Hinrichs 2003). Important in the study of local food movements are the other outcomes of the projects, including the increasing shared experiences, reflecting the frame of engagement, to “a widening circle of organizations and groups” (Hinrichs 2003, 41). This study will explore these considerations.

The Case of Larimer County

This case study of the local food movement in Larimer County, Colorado is a sociological examination of the epistemological nature of how key players like chefs, farmers and local food advocates create and reinforce the local food movement. This research examines the dynamics and networks of these key actors and provides insights into the catalytic role of transformative and systemic learning experiences, normative “be local” proscriptions, and the rise of communities of practice and civic engagement in the beginning phases of such movements.

Interest in this research topic grew out of my experience working for and studying the many sustainable agriculture organizations in California. After moving to Fort Collins, Colorado in 2005, I also participated in local and state-focused Food Policy Council groups, and served as member of the Rocky Mountain Sustainable Living Association (RMSLA) board and executive committee. Through RMSLA I got involved in the local living economy project (which later became separate non-profit, Be Local Northern Colorado, a chapter of the national Business Alliance for Local Living Economies (BALLE) which

espouses the ideas of “glocalization”, 51 percent local ownership, sustainability, and economic self-sufficiency (Ritzer 2004; Schuman 2006). One of the projects that took off during the study period as a result of the Be Local Northern Colorado BALLE chapter emphasis on the re-localization of the economy in Larimer County is “Eat Local, Grow Local,” combining the local ownership ideals with local food. Be Local Northern Colorado grew out of the first-ever mapping of the local value chain, a project that I worked on intensively with two other board members and a manager the farmers’ market in 2005 and into 2006 with the first publishing of the map. Be Local projects increased local discourse related to expansion of the regional capacity and sufficiency of the local food system for Larimer County, providing numerous engagement and educational sites for locavores. In addition to other small projects through the RMSLA, I also hosted other events before the start of the research period. For example, the first bike tour of four urban farms, Tour de Farms in the fall of 2005, which sold out within a week of announcement, before we could even distribute posters. Even after hosting multiple dozens of food and agriculture based events in California, I was surprised at the enthusiasm pouring forth from this community.

Throughout this work and emersion, I became interested in how people were gaining interest in local food in Colorado, where no formal organization was driving the promotion of the problems or alternatives, as is very much the history of the sustainable agriculture and organic movement in California. While I played a significant role in starting up many of the local food and farming-support projects and events, and these projects likely influenced the ways that people were engaging in relocalization efforts, I also wondered: What is the source of this new local food craze? How are people engaged in civic agriculture without the typical NGO to structure the movement?

The purpose of this case study is to examine the social production of knowledge within the local food movement, and the sociological and transformative learning process as the catalyst of personal and community level engagement. Throughout this thesis, I explore the emergent qualities of knowledge generation, along with the context for action – the embodiment of “doing and being local” – to discover the power of transformational learning. An additional goal of this research is to offer critical analysis supportive of the alternative local food movement toward a redistribution of the current economic concentration in the food and agricultural economies.

As confirmation of the need for this kind of applied research, social researchers (e.g. Freidland 2008) have been expressing the need for a new agrifood cluster, to address the chasms in agrifood system thinking, and more readily engage in applied research with the aim of improving the performance of said movements. However, the process of civic engagement in alternative food systems is so far poorly understood (DuPuis and Gillion 2009). Ingram (2007, 299) notes the development of alternative agriculture networks “is a social communicative activity, and ... the alliance(s) pursued by these alternative groups have played a role in the current acceptance of their ideas”. Therefore, this applied study aims to address the conditions of the rise of the local food movement, and to incorporate it into the existing literature and tactics of local and regional agrifood movements.

In the following pages, I expand on transformative learning theories, first developed by Escrow (1991), and later used by Mezirow 1997 to create a theory of adult transformational learning, subsequently applied to food studies by Kerton and Sinclair (2010). Using this understanding and drawing on data gathered from qualitative research on the key players of the incipient local food movement in Larimer County Colorado, I highlight how individual actors are knowledge generators as they shift their own normative ideologies and build communities of practice of engaging civically in local food and agriculture (Lyson 2004). In a study of learning that took place in producer/consumer interface settings, Kerton and Sinclair (2010, 411) found that, “having a connection to their food and to the producers of their food is an experience that inspired many of the other participants to take their learning and consumer behaviors one step further in reflecting their values” (Ingram 2007, 310). The identification of “the decision points, key actors and alliances” will help illuminate the movement origins in Larimer County and illustrate the transformative learning process that is key to the local food movement

Before turning to the case study, chapter two describes the conceptual elements of epistemological theory, and lays the theoretical frameworks for understanding civic engagement, social change and transformative learning. Then, in chapter three, I describe the methodology and the research setting. This sets the stage for the findings of the case study in chapter four, in which I turn to the empirical data of interviews and participant observation to examine how key players’ foundational experiences create a context for action – the rise of “being local” and the process of engagement. I explore the generation of new patterns of normative behavior and the creation of a local, community

centric, civic food culture. Finally, the findings chapter also describes the shifts normative ideologies, the growing sense of what it means to be a citizen engaged in the food that nourishes a community, revealing the transformational weave and weft of the fabric of the local food movement. In chapter five, I conclude with a summary of key findings, insights for the local food advocate, and suggested future applied research.

Chapter 2: Literature Review

This chapter provides an overview of the types and processes of knowledge generation in order to assess the current and potential ways that local food systems engage groups in learning situations that lead to what Lyson and Guphill (2004, 370) call the “the rebirth of a more locally oriented agriculture and food system.” Theoretical foundations of this research originate in multidisciplinary fields. In the following chapter, I discuss the sociology of knowledge, adult transformational learning theories, and the literature related to civic agriculture and local food. Overall, this chapter sets the framework for analysis, relating the rise of the local food movement to the sociology of knowledge, and to the critiques of alternative food movements.

The Sociology of Knowledge

The social production of knowledge is “concerned with the analysis of the social construction of reality,” and “the way in which realities are known” (Burger and Luckman 1966, 3). Polanyi (1962) distinguished between two broad types of knowledge: “explicit” and “tacit”. Berger and Luckman (1966, 3) describe the sociology of knowledge as the “dynamic framework or structure from which information can be stored, processed and understood”. Explicit knowledge is known as “know-what” knowledge because, for example, after reading a document a person can know what to do (Brown and Duguid 1998, 28). Less dependent on the social production of knowledge, but still playing a crucial role in knowledge transmission, explicit knowledge can be transmitted via manuals or written documents for example, and can become epistemic and socially codified documents, more easily transmitting knowledge across communities, geographies and distance (Brown and Duguid 1998, 38).

Whereas explicit knowledge involves a systematic prescribing of the information, allowing the transformation of knowledge without direct experience, the tacit gain of knowledge develops at the local level, through “know-how” experiences, interpretations and symbolic functions (Howells 2002; Brown and Duguid 1998, 28). Direct experiences and innate values and skills, built up over time through social interactions are a type of tacit knowledge (e.g.: in food systems research, this type of knowledge would

include the participant's conceptualization of the meaning of "local," or discourse on the scale of production). Polanyi, for example, believed explicit knowledge required tacit knowledge for interpretation (Howells 2002). In this way, a combination of tacit and explicit knowledge is reliant on the performative and socially mediated nature of knowledge acquisition, and requires the practice of everyday life. As Carolan (2006, 327) notes, "philosophers of science and sociologists of knowledge have argued that knowledge must be placed within the interpretive context in order for it to have meaning". Understanding these theoretical foundations of epistemology offers context for how the local food movement emerges.

Learning to Be

Following Polanyi, Brown and Duguid (1998) argue that tacit know-how is sui generis, but it is also hard to spread, coordinate, benchmark or change. "Know-how embraces the ability to put know-what into practice. It is a disposition brought out in practice. Thus, know-how is critical in making knowledge actionable and operational" (Brown and Duguid 1998, 31). The learning process involves identity formation in the context of everyday life. "People do not simply learn about; they also learn, as the psychologist Jerome Bruner (1996) suggests, to be" (Brown and Duguid 2001, 200). The role of the group or organization is to synthesize and determine critical community action (Brown and Duguid 1998). Of key importance to this research is the fact that informal relationships, built on social links, create additional suitable social links and lead to knowledge traveling easier between groups (Brown and Duguid 1998). As activists engage in working to address food system gaps with many different groups, pollinating each group with their values and ideas, spreading new knowledge. "In particular, [the new knowledge group] gives rise to types of knowledge not supported in a marketplace of individuals linked only by market relations. It also plays an important role in the development and circulation of complex knowledge in society" (Brown and Duguid 1998, 31).

Howells (2002) outlines five ways that distance plays a role in knowledge generation. First, the "knowing self" is influenced by cognitive, social, cultural and economic circumstances, which in turn are influenced by place (Howells 2002). The knowing self is a frame of reference related to where people come from and their childhood context as much as their social position. Second, place and human interaction play key roles in shaping knowledge. In this case, distance is influential because "within the

range of tacit knowledge itself, the less explicit and codified is the tacit know-how, the more difficult it is for individuals and [groups] to assimilate it” (Howells 2002, 872). Third, and similar to Polanyi’s (1962) assertions, tacit and codified forms of knowledge and externally acquired information are involved in an on-going knowledge set that creates our normative ideologies. Fourth, information is also taken up through learning, work, and interaction with others, which is site specific and referenced to our foundational frames. Fifth, to be able to use tacit know-how, information must be interpreted and filtered using past experience and foundational frames of reference, and is contributed to by geographical and community influence. Therefore, what and who you know, and what kind of interactions you have with them will influence the uptake and types of new knowledge gained.

Dispositional knowledge is created through experiences, such as practitioner trainings, interactions with groups or conferences, giving context for the types of know-how relatable to future decisions of the knowing self (Brown and Duguid 2001). Codified and common language increases the ability to share “know-how” knowledge outside of the social relationship that the knowledge is occurring in, and the information can be taken up without direct experience. However, “within the range of tacit knowledge itself, the less explicit and codified is the tacit know-how, the more difficult it is for individuals and firms to assimilate it” (Howells 2002, 872). Thus, the separation between knowing and doing can be bridged by explicit knowledge like printed media (on television, the web, magazine articles, blogs, social network sites, books). “To become meaningful, learning requires that new information be incorporated by the learner into an already well-developed symbolic frame of reference, an active process involving thought, feelings, and disposition” (Mezirow 1994). For example, the alternative food movement has created knowledge ecologies in different forms: on the Internet, in the national newspapers and publishing books. Technology (the internet, and specifically, the bloggisphere and social media) has played a significant role in the distribution of fluid knowledge, lending the social context for commonality that leads to further leakiness of knowledge into and out of organizations. “Living in a knowledge ecology is a reciprocal process, with organizations feeding into each other” (Brown and Duguid 98, 36). Therefore, the media, and social means of acquiring information are constantly evolving a person’s ways of knowing, which is why we find that a journalist like Michael Pollan could go on to have such a huge impact in changing the way people think and feel about food in this country.

Community of Practice

Brown and Duguid (1998) also suggest that practice is the best framework for the manifestations of knowledge, accounting for the epistemic division between knowing and being. Further, they argue that the sociology of knowledge has placed too much attention on the community, and too little on the implications of practice (Brown and Duguid (2001). A community of practice - an extension of Tonneis' *gemeinschaft* theory, where the community is implicit, not generally self-defined - is a group across which know-how and sense making is shared (Brown and Duguid 1998, 32). For illustration, small ad-hoc community-based groups who are inspired by national media or best practices manuals and stories of food systems change successes in other communities are the local inspiration to begin work toward school food change, or open a new farmers' market – these are all elements of the process of creating a community of practice.

Groups and organizations play a particular role in shared practices, “helping shape the context for formal and informal knowledge sharing and in providing support infrastructures to utilize knowledge within the innovative process. In this way, they develop the associative capacity of the system with regard to knowledge” (Howells 2002, 877). Shared practice creates “communal know-how”, as elucidated by Brown and Duguid (1998, 32):

... [A] community of practice develops a shared understanding of what it does, of how to do it, and how it relates to other communities and their practices – in all, a ‘world view.’ This changing understanding comprises the community’s collective knowledge base. The process of developing the knowledge and the community are significantly interdependent: the practice develops the understanding that can reciprocally change the practice and extend the community. In this context, knowledge and practice are intricately involved.

By working together to put dispositional know-how into practice together, the group develops a history of practice and shared cumulative knowledge. Such group learning opportunities for farmers, community activists or for policy makers have been found to be the foundation for communal know-how related to the spread of “alternative” agriculture (Ingram 2007). Organizations and groups that codify their local food or alternative agriculture experiences and successes within knowledge networks become the local social nexus, growing what Brown and Duguid call “ecologies of knowledge” (1998, 28). Similarly, Howells (2002) says communities of practice are creating the “common knowledge context,” referring to how knowledge sets interact, and are configured and harnessed by organizations or structured groups.

Relational Proximity

Most formal groups are hybrids of overlapping and interdependent communities, creating context for local and peripheral knowledge and learning (Brown and Duguid 1998). Initially those bringing new ideas to groups may be translators, moving to knowledge brokers as they participate with the group. Knowledge brokers, such as alternative farmers or community activists, bring techniques and documents to be shared in the community, and create a community of practice through interaction with food, farm or other tacit knowledge opportunities (Brown and Duguid 1998; Kerton and Sinclair 2010). Such overlap creates inter-communal relationships that “allow the organization to develop collective, coherent, synergistic organizational knowledge out of the potentially separate, independent contributions of the individual communities” (Brown and Duguid 1998, 32). Local relationships matter because codified spillover is limited spatially because of “distance decay” in peripheral regions, which limit social context for tacit knowledge sharing (Howells 2002). Similarly, relational proximity – associated with routines and social practices may be more important than geographical proximity in a direct sense, but within organizations and groups, geographical proximity is more profound in terms of innovation and productivity (Howells 2002). For example, farmers markets and direct markets effect consumer shopping choices, and contribute to the willingness to pay for local or sustainable products (Thilmany and Bond, 2008). For these reasons, local and national affinity groups play a key role in creating the context for new tacit and explicit food knowledge locally and at a distance.

People learn by interacting with a group first on the periphery of a community of practice, where through communication and technologies, they can lurk and take part, but not have to be fully members of a group (Brown and Duguid 1998). Within communities – be they small groups or large, the process of reciprocity is inevitable. “Between communities, however, whereby definition practice is no longer shared, the know-how, the know-what, and warrants embedded in practice must separate out for knowledge to circulate” (Brown and Duguid 1998, 35). The difference of knowledge shared between communities of practice is significant to understanding food system change. Different communities of practice have different standards and ideas of what is significant and these divisions can become prominent and problematic, as they do between farmers who sell commodities through a distanced and often pre-described distribution chain, and those whose consumer market is the local community where relationship

to the farm's practices predominate the value chain and business decisions. Without a shared sense of the practice and values, a way of sharing codified knowledge within and between communities, social supports for the spread of knowledge and the means for sharing warrants, problematic divisions can disintegrate communities, or the knowledge will not be sticky because of the friction of different embedded principles and attitudes (Brown and Duguid 1998). The flow of knowledge through and within groups gives context for understanding that learning through groups occurs via collective know-how, and dispositional knowledge.

Collective know-how is the type of knowledge created during community events, or other socialization opportunities, which create a shared group perspective. "Members of such groups collectively develop an outlook on work and the world that may reflect an organization as a whole, but will most intensely reflect the local community. Within this, because of the shared perspective, knowledge can readily be shared" (Brown and Duguid 1998, 32) More generally, collective know-how "supports the notion that collective practices leads to forms of collective knowledge, shared sense making and distributed understanding that doesn't reduce the content of the individual heads" (Brown and Duguid 1998, 32). Therefore, tacit knowledge is not shared if, for example, local food players are not in a "community of practice" or actively part of larger knowledge networks, such as national or regional listserves (like the Community Food Security Coalition's list, COMFOOD with more than 5,000 subscribers from all types of backgrounds), or attending regional or local conferences, networking and meet-up opportunities, or the practice of groups reading the same topical magazines, journals, social network sites or blogs. This type of tacit knowledge sharing is also the foundation for engaging in food citizenship.

The next section of this chapter explores how instrumental and communicative learning situations can be transformational, relating these foundational epistemological theories to participating in local food.

Transformative Learning

Transformative learning is a process that represents a change of consciousness in that it changes how the learner perceives and makes sense of the world (Kerton and Sinclair 2010).

Mezirow (1994, 1997) developed adult transformative learning theory. He writes that a transformation of perspective underlies the ability to become aware of issues, question the existing system, engage in problem solving and transform normative ideologies (Mezirow 1997). Transformation of frames of reference and normative views either takes place through critical reflection and transformation of the habitual mind, or results from an accretion of transformative points of view (Mezirow 1991). Kerton and Sinclair (2010), using Mezirow's theory that transformative adult learning takes place through critically reflective thought, participatory interactive group deliberation, and problem solving, found that direct relationships between consumers and farmers affected normative ideology. For example, this research shows that the popular discourse of "the broken food system," spread through explicit modes like movies like *Food, Inc.*, *The Real Dirt on Farmer John*, *Fresh: The Movie*, *King Corn*, and national best seller books like Michael Pollan's *Omnivore's Dilemma* and Barbara Kingsolver's *Animal Vegetable, Miracle*, among others, played a role in the establishment of new points of view and offer critical reflection on the system as a whole, leading to an "imagining of alternatives" (Mezirow 1997, 8), and an establishment of new common values. The influence of transformative learning lies in the empowerment of the individual to think as an autonomous agent – or as Mezirow has shown – to "negotiate his or her own values, meanings and purposes rather than to uncritically act on those of others" (Kerton and Sinclair 2010; Mezirow 1997, 11).

Instrumental and communicative learning are the two types of learning Mezirow (1997) identified as creating transformational learning situations. Instrumental learning involves the things, skills or information learned that may involve tacit problem solving and testing claims, such as growing ones own food, or what vegetables grow well in geographic areas in what seasons, or the determination of cause and effect relationships across the food system, (Kerton and Sinclair 2010). In a study of how people engage in CSAs and farming experiences, Kerton and Sinclair (2010) identified the grounded categories of instrumental learning related to food systems knowledge include how people gain new understandings

of potential risks and impacts, biophysical interconnectivity of systems, personal health, and ecosystem health and climate change. Communicative learning involves becoming aware of one's own assumptions, values and beliefs, becoming critically reflective, establishing new points of view, and being able to interpret and validate what is being communicated through discourse (Mezirow 1997; Kerton and Sinclair 2010). Similar to Howell's (2002) "common knowledge context", discourse plays a central role in making meaning. Meaningful change involves working with food system stakeholders to gain a unifying discourse and ability to set collective action (Campbell 2004). Awareness of problems, autonomously negotiating or re-thinking values, engaging in conversation around these issues, and working to solve those problems is how transformative learning happens. Food's transformative power is in the "literal and symbolic functions of linking nature, health, culture, human survival and livelihood as a focus of resistance to ills of our current social paradigm" (Kerton and Sinclair 2010, 403). As specific transformational experiences are individual, the impact on an individual's behavior causes changes in the social, environmental and physical setting as well. The process of learning takes place between individuals and in shared spaces, or even between competitive networks (Howells 2002).

Campbell (2004) notes of the alternative food movement trajectory, that meaningful change involves working with food system stakeholders to gain a unifying discourse and ability to set collective action. "Socially-embedded knowledge sticks because it is deeply rooted in practice. Within communities, practice helps generate knowledge and evince collective know-how" (Brown and Duguid 1998, 35). Communicative learning, then, is aided groups who have social status or capital or labels, certifications or other ways that help people sort through situations with lots of information, ideas and beliefs. Therefore, the workplace, shared practice space, or joint venture operations (like community bartering, cooking together, informal know-how trading such as at farmers markets, town hall meetings, seed exchanges or potlucks) are also integral to forming common and communicative knowledge. Related to food systems research, Kerton on Sinclair (2010) found, that food is the perfect setting for social action and learning to co-emerge. Kerton and Sinclair elucidate this point:

Learning is most powerful in contexts where people struggle to make sense of what is happening to them and develop ways to take action for change. The current food system faces many challenges: trade liberalization in an economy focused on export growth and

globalization, genetic engineering of organisms, loss of biodiversity and the small family farm, and all the social and environmental impacts between. As a 'problem-posing' metaphor, food has the power to generate substantial learning (Kerton and Sinclair 2010, 403).

Thus, harvesting food, eating and preparation can be sites of discourse and a way of making meaning from value claims while critically examining the evidence through the senses and sharing food around a table of people with alternative points of view (Kerton and Sinclair 2010). Contesting the terrain of the food system, in actively seeking and making the invisible visible, is important for individual and collective agency (Hassanein 2003). The geographical, distance and place-based definition of local food and agriculture is subjective, leaving interpretation open, and therefore the answers to the question "what do you think of as local" is a type of tacit or know-how knowledge (Howells 2002). The next section of this chapter explores the literature of alternative agriculture and civic engagement, related to Howell's "learning to be".

Alternative and Civic Agriculture

Call it food democracy, community food system, food citizenship, or civic agriculture, much of the literature on engagement in agrifood systems addresses the intimate nature of food and its potential to generate and engage in action (Campbell 2004; Lyson 2005; Hassanein 2003; Clancy 2004; Allen 1999; Wilkins 2005; Wilkins 2011). Food democracy refers to the idea of public decision making, increased access and collective benefit from the food system as a whole (Levakoe 2006; Wilkins 2011, Delind 2011), and it is (ideally) about "citizens having power to determine agrifood policies and practices locally, regionally, nationally and globally" (Hassanein 2003, 79). Food democracy is the process by which individuals and communities engage in the ownership and practice of local food, leading to what Delind (2011, 273-274) describes as "the nature of participatory democracy and the empowerment of the local people". In relation to local action and engagement, Johnston writes (2007, 263), "consumerism has offered the most potential not when it has confined itself to obtaining value for money at the point of sale, but when it has sought an active relationship with the wider concerns of citizenship". Similarly, University of California Davis Sustainable Agriculture and Education Program (SAREP) defines a community food system as, "a collaborative effort to build more locally based, self-reliant food economies – one in which

sustainable food production, processing, distribution, and consumption are integrated to enhance the economic, environmental and social health of a particular place” (Feestra 2002, 100).

More specific to the epistemic nature of the local food movement, “food citizenship” is the sociological and transformative learning process and community level engagement in local food and agriculture, and the broader empowerment that results (Wilkins 2005). Consumer-based emerging community food systems are evidence of a growth in food citizenship, which according to Wilkins (2005, 271) is the “practice of engaging in food related behaviors (defined narrowly and broadly) that support, rather than threaten, the development of a democratic, socially and environmentally just, and environmentally sustainable food system.” For example, Starr (2010) and others link local and place based movements to urban agriculture, buy local campaigns, developing food micro enterprise or regional distribution systems and other small initiatives to efforts to de-link civic agriculture from the globalized and commoditized food system. Just as broadly, Lyson (2005) refers to the process of civic agriculture, as locally organized system of agricultural and food production characterized by networks of producers who are bound together in place. Counter to geographical and political distancing of the food system, civic agriculture is recognized as the form of locally based agriculture and food production that is “tightly linked to a community’s social and economic development” (Lyson and Guptill 2004, 371). Civic agriculture is most often viewed “in opposition to the global, corporately-dominated food system” (Delind 2002, 217), and is linked to place-based anti-globalization movements (Lyson 2000; Wekerle 2004; Delind 1999). As people struggle to make sense of what is happening to them in the case of health and environment, to understand the value chain of relationships and economic systems that brings food to their table, and as they learn through various forms of media and through their social networks, they begin to translate explicit knowledge and tacit experiences into action (Goodman and DuPuis 2002; Wilkins 2005). “Civic agriculture is the embedding of local agriculture and food production in the community” (Lyson 2005, 92), but, write Goodman and DuPuis (2002, 15) “...how the consumer goes about “knowing” food is just as important as farmers’ knowledge networks in the creation of an alternative food system”.

Therefore, for the purposes of this case, these terms “civic agriculture” “food justice”, and “food democracy,” are broadly synonymous. In this thesis, “food citizenship” will be used in tandem with the

other terms to generally describe the process of local food system epistemology, practice and engagement.

In critique of the alternative food movement's inability to change the existing system, Allen (2004) and Campbell (2001) find that sustainable agriculture suffered under the weight of ambiguous definitions, and a lack of clear representation. Additionally, actors operate within the complexity of the "dominance of conventional food networks" (Carolan 2012, 284). No matter how alternative the local food system becomes, "any successful alternative food network must still be embedded within the very material conditions shaped by the economic, political, and social dominance of conventional food networks" (Carolan 2012, 285). Organizations and coalitions like the Community Food Security Coalition (CFSC), further served to codify movement objectives and encourage citizen engagement in the form of local food policy council development, and technical assistance support for non-profit organizations or local governmental agencies such as cities to engage in issues that affect health, agriculture, support for small farmers, and environmental local and regional policy making related to the food system. Documented how-to kits for community food assessments can draw overlapping disciplines and professional backgrounds, various community interests or stakeholders, and have documented food-ways, food desserts, and cultural meanings, and created explicit knowledge tools for engagement at the local level (Dixon 1999; Allen 1999; Winne 2005). Similar to the US environmental movement, food policy groups working for sustainable agriculture change or for an alternative food system involve activists and supporters, engage in a struggle with their opponents to shape the ideological landscape and societal practices (Stern, et al 1999). Writing from a social psychology perspective, Stern et al (1999) note that beyond committed public activism, critical movement support occurs in the form of less intense active citizenship such as writing letters, joining groups, reading related literature, and making changes in behavior. Further, Stern et al (1999) describe that norm-based action flows from three factors: 1) acceptance of particular personal values, 2) beliefs that things are important to those values are under threat, 3) beliefs that actions are initiated by the individual can help alleviate the threat and restore the values. "The base for general movement support lies in a conjunction of values, beliefs and personal norms—feelings or obligations that are linked to ones self expectations that impel individuals to act in

ways that support movement goals” (Stern et al 1999, 83). Because food is a way that personal values and broader principles are embodied, food system engagement is transformative.

In summary, the arc of subjectivity as individuals working in and between social networks is the basis of this investigation in regards to how people begin to know about their local food system, what they share with others in the community, and how transformative learning situations evolves into civic agriculture. Carolan (2006) argues that the social relations of trust and knowledge are contested and shaped within and between social networks and organizational configurations, emphasizing the everyday life and the local act of practice. In addition, Howells’ (2002) theories and identification of the five ways in which knowledge is geographically bounded describe how performative reflexive localism and communities of practice create the critical conditions for transformative learning and engagement in food citizenship and civic agriculture. As Kerton and Sinclair (2010) found, transformational behavior change has the potential to be evidenced at least three times a day as people negotiate their food choices and challenge the mainstream system. Thus, as people engage in the process of understanding, discussing and debating, they also move into a level of participation and consciousness-raising. The co-emergence of transformational learning and the shifting normative ideologies that lead to civic engagement within the local food system will be explored throughout the rest of this research.

Chapter 3: Research Setting, Demographics and Methodology

This chapter describes the geography and demographic information of the population of Larimer County, Colorado, and includes data on agriculture, the direct market, and food security trends for the region. It also details the qualitative methods used in this study.

The Setting: Larimer County

Larimer County is located on the northern end of the Front Range Mountains of Colorado, in the transition zone between the Southern Rocky Mountains and the Colorado Eastern Plains. The Front Range Mountains run north-south between Casper, Wyoming and Pueblo, Colorado, with ridges of up to 9,500 feet elevation, above the open eastern country of the Great Plains. The arid climate receives an average of 16 inches of rain a year, less half of the average rainfall for US states. The region gets most irrigation water from the South Platt River Basin.

The City of Fort Collins (2010 population 137,587) is the Larimer County seat and is located at 5,003 feet elevation above sea level on the Plains side of the Front Range. Fort Collins is anchored by Colorado State University, located in the Old Town city center, and is known for high quality of life factors and many “best place to live” awards (Money Magazine). To the south of Fort Collins, the second largest city in the county is Loveland (2010 population 65,614). There are six other small, incorporated cities within Larimer County. Estes Park, famous for being the headquarters of Rocky Mountain National Park (2010 population 5,858), is the highest in elevation at 7,522 feet.

As of the 2010 United States Census, Larimer County had a population of 299,630, making it the seventh most populous in the State. The population grew approximately 19 percent between the 2000 and the 2010 Census. Fifty percent of the growth since 1970 can be attributed to net migration, according to the COMPASS of Larimer County. The racial make up of the population as of the 2010 census was 90.5% Caucasian/White, 10.6% Hispanic, 5.8% Other or Two or More Races, 1.9% Asian, 0.08% Black,

0.07% American Indian. In 2010, per capita personal income in Larimer County (\$38,546) was lower than in Colorado (\$42,226) and slightly lower than the United States (\$39,945). However, race is an indicator of income disparity in Larimer County, as Figure 3.1, below, indicates ([COMPASS of Larimer County](#)).

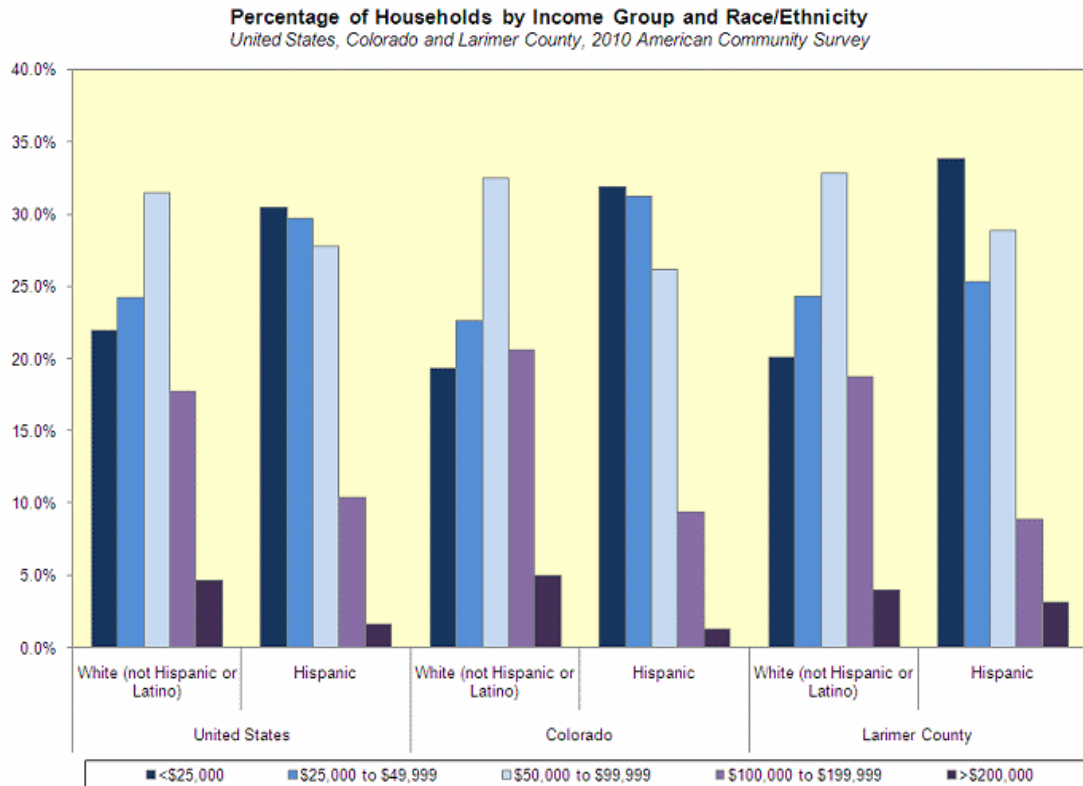


Figure 3.1: Race and income disparities in Larimer County, Colorado and US.

Agriculture and Food Demographics

Trends over the past three decades indicate a major shift in the number of and size of farms in Larimer County. According to COMPASS Measure of Larimer County, the overall the total farm acreage has decreased 16.1%, and the number of farms increased 56% from 1982 to 2007. Additionally, the 2007 USDA Census of Agriculture shows 61% of farms in Larimer were less than 50 acres. The 2010 Northern Colorado Regional Food Assessment indicates that Larimer County had 1,757 farms, totaling 489,819 acres, with an average farm size of 279 acres. Over 700 of the farms in the County are in the range of 10 to 49 acres. Farms employed 2,278 workers, for a total payroll of \$19.4 million, and the estimated market

values of agricultural sales for Larimer County in 2007 totaled \$128 million (crops were \$49.87 million and livestock sales equaled \$78.2 million). The total cropland was 119,984 acres, of which 63,405 acres were irrigated for animal feed or food production. There is increasing diversity in the types of crops and livestock being produced, but given historic patterns, field crops, grass/pasture and cattle are still very dominant.

The most recent data on the direct market indicates a dramatic increase in the number and overall income of farms reporting direct market income. According to the Regional Food Assessment: (2010, 32)

Between 2002 and 2007, 434 farms began direct marketing (2,777 up from 2,343), and 7.5% of all farms in Colorado now do some direct marketing (compared to 6.2% for the U.S. as a whole). This increase in activity resulted in revenue from direct sales increasing from \$17.4 million in 2002 to \$22.5 million in 2007 (which is equivalent to 19.4 million in 2002 dollars). Average sales per farm increased during this same time from \$7,429 to \$8,133. These revenues include channels outside of farmers markets (roadside stands, CSAs and pick-your-own), and illustrate the significant shift in marketing strategies by Colorado producers. For Larimer County, \$838,000 in agricultural products was sold direct to the consumer in 2007.

While elsewhere in the report, direct market farmers are found to be increasing their year-round crops via season extension and new indoor markets, total production in Larimer County is trending slightly down (Northern Colorado Food Assessment 2010, 27). (Please see the Food Assessment for more information comparing regional production amounts and types of crops.) In addition, the majority of the prime farmland near the densest populations in the county has already been developed or paved over. The food assessment process caused some to reconsider land preservation efforts for food production.

The amount of land in agricultural production in Larimer County is shrinking, and the limited amounts of prime agricultural land remaining are located in the pathway of potential future urbanization. It may be that ongoing conservation efforts could be refocused to lands of productive interest rather than recreational and aesthetic criteria (Food Assessment Conclusion Report 2010, Section 3, page 2).

The Northern Colorado Regional Food Assessment Conclusion Report (2010, 6) indicates that consumers are seeking more options for local food in places they already shop and eat (retail grocery and restaurants), but that direct sales continue to grow. Most of the direct market Larimer County or Colorado data available begins with the 2002 USDA Agricultural Census, and is compared to 2007 Census data (analyzed and released by the USDA in early 2009). The USDA 2012 Census of Agriculture (conducted

every five years, next planned to be released in late 2013 or early 2014) will provide the crucial third data point for many of the indicators of local food system change. In the meantime, the entirety of the 2010 Northern Colorado Food Assessment report is online: <http://www.larimer.org/foodassessment>.

Food Insecurity

In regards to access to local food and price, “the price of food changes in importance as a variable in food selection between those challenged by food security (where price is the most important factor), and local food buyers (where price is superseded by convenience factors)” (Food Assessment Conclusions Report, 2010, 6). Since the 2008 credit and lending crises, indicators of community food insecurity have increased in communities nationally. However, based on my experience working with anti-hunger agencies in California and with the Community Food Security Coalition in Washington DC, food security data is difficult to assess because it is methodologically complex and local providers often do not have performance measures in place. For example, Federal guidelines for eligibility, the perception of red tape and involved in applying for the benefits, and the total amount of benefits available each effect the individual decision to apply for emergency food benefits (Poppendieck 1999). Additionally, to accurately assess the rise in demand, the number of people on food stamps year over year would need to be compared to the population of eligible people. Instead, most agencies report number of users only, which is only an evaluation of use, and only one factor in an assessment of need. That said, here are some data for Larimer County regarding food insecurity from the Regional Food assessment:

Larimer County saw the greatest increase in population at or below the federal poverty level (47% increase over 4 years), compared to 33% in Weld and 13% in Boulder counties.

2010 food stamp outlays (called the Colorado Food Assistance Program) in the region almost doubled since their previous high in 2005, and almost tripled from their lows in 2007. The number of food stamp recipients in Larimer County increased by 63% between 2007 and 2010.

Although the number of applications for food stamps decreased 7.9% between 2009 and 2010, the number of households receiving benefits increased 22.3% during the same time period.

Overall, the increase in poverty levels and an “increase of 101.5% between 2006 and 2011” of eligible users of the Colorado Food Assistance Program indicates that food insecurity is on the rise in Larimer County. Finally, it is worth noting that the Regional Food Assessment Conclusion Report includes

significant suggestions for understanding food security, and for further research regarding processing distribution and marketing on the Front Range.

Methodology

Qualitative methods are suited to understanding the personal and community based dynamics of the local food movement, and revealing the process by which a civic movement evolves (Marshall and Rossman 2006). By getting as close as possible to the experience (Deegan 2001; Emerson et al 1995), this qualitative study examines the sharing of local knowledge, values and goals about local food systems, and the seeming rise in engagement surrounding local food. In the following section, I detail the logic and qualitative methods used in sample selection, data collection settings, methodological issues, and data analysis.

Sample Population

The four groups chosen for this study are: a) farmers/producers, b) buyers (mainly chefs), c) local food advocates or professionals in Larimer County, and d) key informants. In total, the sample is of actors within the food system who were integrally involved in the promotion of ideas surrounding an alternative community-based local food system. The sampling frame for the 22 interviews conducted included a) farmers who direct market their products within Larimer County (n=8) b) chefs who buy direct from farmers (as reported by farmers) (n=5), and c) two types of advocates of grassroots-level food system change, in either paid or unpaid positions; these include staff employed by an organization or agency related to food or farming, and members of the community volunteering (n=9). Two farmers and one advocate indicated they wear multiple hats in and across the food system, but for ease and purpose of this study are only counted for the perspective they bring from which they make their living.

Snowball methods were used to discover the sample population from three initial interviewees, based on their known engagement and interaction in the local food system. The question, “Who do you think of as a key player in rebuilding the local food system?” was part of the entire interview process to allow the social network to self select the other engaged members of the local food enthusiasts. The

sample population answered questions related to their goals for and values of the local food movement, and they were asked to articulate how they share local food knowledge (see Interview Guides, Appendix A). In addition to interviews, opportunistic methods at farmers' markets and at public meetings were used, and questions or conversations encountered in the field setting were documented in field notes.

Gaining Entrée

Fieldwork began with permission from the Institutional Review Board (IRB) at Colorado State University in November 2008, and continued through May 2009. Throughout the research I was a participant observer or observer as participant (Gold 1958). Paying attention to my positionality and deciding how to situate myself during the field research was an important consideration; I was already situated as a member within the nascent local food movement in Fort Collins and in the Front Range region and had long been involved in the national discourse and action regarding organic and sustainable agriculture and food policy. In observation settings, I identified myself as a researcher, and in some cases maintained my existing partial or active member role (Adler and Adler 1987). Liebow (2003, 166) notes, "the degree to which one becomes a participant is as much a matter of perceiving oneself as a participant as it is of being accepted as a participant by others". In more personal settings where relationships were established before the interview process, it was known that I had transitioned to graduate student. In these settings, like small group meetings or dinners where I was already a participant in the social group, I was able to record more intimate thoughts and feelings. In other group settings I would make field notes directly afterward. I encountered very little difficulty in gaining access in the field, or in setting up interviews. Only two of the farmers recommended in the snowball process as important to the local food movement were unreachable for a meeting or interview, and thus their voices are not included though their contributions were likely significant.

Interviewees determined the setting. All of chefs choose to be interviewed in their work setting, which provided partial participant observation opportunities during the interactions with the farmers making deliveries, customers talking to chefs about local food, and document analysis of their menus and marketing materials reflecting how the business chooses to educate their customers about their local food values. About one-third of the interviews were conducted in the person's home or on their farm. In that

case, I was often one step removed from being a stranger by way of the snowball sample; I had a connection to someone they knew.

Key Informants

Key informants assisted in gaining a deeper understanding of the experiences of the groups chosen for study, and helped gain deeper entry into the field as a researcher. One of my key informants is an organic farmer and former manager of two farmers markets. She knows many, if not most of the direct market farmers in the Front Range region. This informant also has developed market relationships and social ties with area chefs and restaurateurs and introduced me to those chefs that purchase locally grown produce, dairy and meat as needed. For example, I had numerous conversations with this informant at her farm, in the truck driving to the farmers market in Wyoming (when I worked for her farm briefly), on the phone while she was driving to or from the farm, in person at the Old Town Farmers' Market (when I worked for another vendor there), and in social settings like dinner at her house, or local food networking meetings, for which she provided much of the food and the conversation continued over the meal. I often had similar follow up interactions with other farmers who also became key informants. The second key informant, was the director of a local NGO project responsible for putting on local food economy events and promotions. We worked together closely visioning and initiating various community education projects related to the local food system for two years before this research project began. Some of the members of the small group who met in 2007 and 2008 as the volunteers for the Eat Local, Grow Local committee (mapping the local food system and planning networking events) were key informants throughout the research, and all of them were also identified via snowball as part of the sample.

Data Collection

A qualitative study increases the understanding of the development of social realities and how they operate and impact individuals and organizations of individuals (Berg 2007). "To understand behavior, one must first understand the definitions and processes by which they have been created... human behavior is an on-going and negotiated interpretation of objects, events and situations" (Berg 2007: 13). The three qualitative methods used for data collection were participant observation, semi-

structured interviews, and document analysis. Used together, these methods produce a deeper understanding of the experiences of those involved (Berg 2007; Marshall and Rossman 2006), and are acceptable approaches in the transformative learning and sociology of knowledge literature to document the on the ground learning experiences during the incipient stages of creating an alternative and local food movement.

Participant Observation

This study entailed participant observation at farmers' markets, meetings and public events for a period of six months (November 2008 through May 2009) as a full participant. Public settings allowed for ongoing conversations with key informants, a deeper understanding of how the social network formed during this time, and insight into what types of information was shared in these groups. Public meetings and events throughout the fall and winter were the main sites of observation of grassroots activists, as they are related to the production of knowledge regarding the local food system. The topical and public nature of these settings also identified the overlap and evolution of group participants. Written material and websites related to meetings and events were analyzed as part of the process of the participant's gain of new knowledge. Some interviews and observations took place in restaurants, cafes, coffee shops, during cooking classes, or in one case, the home distribution point for a local food-buying club. Participant observation in these settings revealed the dynamics and conversations between food systems players, the questions individuals ask of each other, and the types of information they share about the process of forming an understanding of the local food system. Some of the community events surrounding local food during the study period took place in the larger cafes in downtown Fort Collins. I also served as instigator of two significant events related to local food during the research period: the Food, Gardening and Growing Town Hall Meeting (which subsequently became an annual event at the Bean Cycle Bookstore put on by the co-located Wolverine Farm Publishing), and a monthly Local Harvest Happy Hour networking event at a restaurant known for serving local farmers' products. These events, and others described herein, like the annual "Getting Connected" networking meeting, were significant for relationship building and are referenced in field notes and in interviews.

Two area marketplaces for direct market farmers were also participant observation sites. The Larimer County Farmers' Market, run by the Larimer County Extension Office, has been in the downtown or "Old Town" area of Fort Collins for 33 years. Be Local Northern Colorado co-hosted five indoor winter markets for farmers and value-added food producers over the 2008-2009 winter season, after the popularity of the first two indoor markets over the 2007-2008 winter. Held in the open space on the ground floor of the Opera Galleria alongside other year-round shops, these markets are the only direct-market outlet in Fort Collins for growers and food processors during the winter off season, and are a significant new income for these food and craft producers. Here is a summary of the outcomes of these meetings, written for the Northern Colorado Regional Food Assessment Conclusion Report:

"In addition to encouraging producers to expand their offerings and production volume, the Winter Farmers Markets are helping to accustom area farmers' market shoppers to year-round availability of local food. This kind of effort to simultaneously increase both the supply of and the demand for locally produced food is critical to the growth and strength of the smaller farmers and ranchers in the three counties." (2010, 15).

These projects are part of the web of local food knowledge, and as noted by participants in the findings, are important to the development of engagement in the local food system, but the projects themselves are not the focus of this research.

Each of these events-based group settings includes many volunteer hours of my own, and many of the interviewees in the professional category staffed these events, adding to their sense of ownership of the group process and acceptance of my role in the field. These public market and workshop settings served as observation sites to describe the relations of the network of farmers/ ranchers, chefs/buyers, activists/community members at the main site of business-to-business engagement and social network building. Direct participant observation involved working at farmers' markets, traveling to farms, gaining first hand-experience at multiple urban public forums, presentations, grassroots meetings, and attending relevant events as invited by key informants. In addition, the market setting allowed for participant observation of who among my sample was at the market, what questions people in general ask farmers about local food, and what type of information individuals share about the food system at farmers' markets. Throughout the study period, indirect participant observation occurred in public spaces like cafes, farmers markets and restaurants where interviewees conducted business.

By taking meticulous notes, I documented the experiences of the farmers/producers, chefs, other food professionals and community members as they negotiated the process of learning from each other in group settings, making their own new knowledge and connections, problem solving and other forms of communicative and instrumental learning. These various events and informal conversations were recorded using standardized field note methods that detailed the scene and focused on the research questions. As Emerson, Fretz and Shaw (1995, 9) note, “field notes are products of and reflect conversations for transforming witnessed events, persons, and places into words on the paper”. On the fly questions (initiated by the key informants or myself) often happened in public settings, and in those cases jotted field notes and memos were recorded in note books, on a lap top computer and on an MP3 player, as appropriate for the setting and situation.

Participant observation captures experiences and tapestries of everyday lives in an ethnographic account (Berg, 2007). For this reason, participant observation methodologically can encapsulate the reproduction of knowledge and relationships embedded in community action, as is common in civic engagement and local food systems. Buraway (1991, 291) asserts, “as a technique of research, participant observation distinguishes itself by breaking down the barriers between observer and participant, between those who study and those who are studied”. Participant observation tells the story of “how the people involved talk about and understand their connections with these outside entities and forces” (Emerson, Fretz and Shaw 1995, 138). In these ways, this study links local findings to broader settings and makes “specific connections within the setting to outside social influences,” regarding the sociology of knowledge and the process of engaging in civic agriculture and food (Ibid, 138; Wilkins 2011).

Semi-structured Interviews

Twenty-two individual semi-structured face to face interviews with both males (10) and females (12) were conducted, lasting between 60 and 120 minutes. All of the participants were white, with ages ranging between early 20s and late 60s, though most were between the ages of 30 and 55. All were informed of the overall goals of the study, the sample and at the beginning of the interview anonymity, confidentiality measures, and the consent form were reviewed and signed. The setting for the interviews

was decided based on convenience to the interviewee. To ensure that accurate information was gathered, all the interviews were recorded on a small handheld MP3 player. Jotted written notes recorded key words and phrases, and/or the sequence of events, as well as post-event or post interview notes (Berg 2007).

The primary goal of the interviews was to better understand how individuals interact with the other actors in the setting, and to explain the processes that lead to increased knowledge about the food system and willingness to take action (see Appendices A, B and C). Interviews "...provide maximum opportunity for complete and accurate communication of ideas between the researcher and the respondent" (Cannell & Kahn, as quoted in Berg 2007: 97). Combined with participant observation, interviews "allow the researcher to understand the meanings that everyday activities hold for people" (Marshall and Rossman 2006: 112). The interviews consisted of asking open-ended questions following the interview guide.

Data Analysis

The resulting transcripts of the interviews provide the majority of the data collected, along with the jotted notes and cumulative personal experiences working with the key informants and interviewees as a full participant. Immediate transcription allowed for reflection and refinement of the observation and interview process. The transcription began the coding process, though according to Weiss (1994), coding continues at any time while reading the transcripts, and perhaps not until the final report is completed. (In this case, the coding continues each time a file is opened.) After typing the transcription, a brief summary of the interview was written, including the central points, what I may have learned, what information modifies previous ideas, and the emergence of potential working definitions of key concepts (Weiss 1994; Denzin 1989).

The interviews determined the social process of engagement in the issues and values surrounding food system relocation and described the experiences of sharing and gaining new knowledge. The interview data were analyzed, sorted, coded and categorized into broad themes by hand, using Word and Excel documents, white boards, and copious notes, based on themes from the literature, and using the strategies of grounded theory methods. Keeping the fundamental question, "what's

happening here?” at the forefront while utilizing the strategies of grounded theory analysis allows the researcher to be grounded in identifying the social process (Charmaz and Mitchell 2001: 164). Further, Strauss and Corbin (1994) emphasize that theory is grounded through the process of reflecting upon the developing relationships while doing the research. While coding the data, general themes and ideas regarding the social production of knowledge, engagement, and social change began to emerge.

Methodological Issues and Challenges

Objectivity begins with recognizing where bias is most likely to occur, and with paying attention to whose side we are on when we claim bias. All the participants were, by chance white, and I am white. I am of similar age to many of the participants. My existing role within the network of people interested in expanding the small farm economy and supporting a local food system entailed a discursive attention to the problem, as described by Adler and Adler, of perceiving “the setting through a fresh perspective” (1987: 69). While I played a role in the local food movement in Larimer County for two and a half years before undertaking this study, I was cognizant that the researcher-activist, of course, must find her/his own comfort level with the degree of attachment (Friedland 2008), and therefore I aimed to avoid “becoming the phenomenon” (Adler and Adler 1987). However, it is important to note, “the best fieldwork emerges when the sociologist is completely immersed in the community under study” (MacLeod 1995: 270). In most cases during the time I was in the field, I was an insider. Existing relationships changed subtly as I initially pulled back from being a co-planner and collaborator to working on the edges and visibly taking notes, though I continued to participate as an invited member of the groups.

There were very few methodological challenges related to this research. As I built new relationships wearing both an experienced professional hat and a student researcher hat, a particular point of tension arose before the research officially started, and continued into the field phase of the research. This occurred when I was asked, as a representative of the Rocky Mountain Sustainable Living Association (RMSLA) board and Be Local Northern Colorado project member, to discuss the concepts of community food security and food policy councils with the agricultural commission. The Larimer County Agriculture Extension agent in charge of the meeting took exception to my presentation and the concepts presented, putting me in an awkward position in front of the area’s largest agricultural landholders. A clear

tension between the different practices of direct market farmers versus larger scale commodity or export producers was established. This person directly challenged me outside meetings and in phone conversations about the need for local and sustainable agriculture. He expressed concern about the attention and focus on small scale and direct market farming being inappropriate to promote when “production agriculture” is what feeds and employs people. He continued to circulate this issue in small group meetings in which he was an unwilling but appointed participant, repeatedly questioning the legitimacy of our work without buy-in from the “traditional” farmers and owners of larger tracts of agricultural land. This person’s complaints trickled down to other, formerly interested County employees who said they were concerned about participation in a food policy council because of the perception that public sector employees might be seen as “creating a problem for traditional agriculture”. Eventually this person suggested community food security might be more politically viable than a food policy council because everyone can get behind feeding the hungry.

This key contact had initially agreed to provide entrée to the farmers and producers in the county for my research, but left the position at the beginning of the research period before being interviewed. For some time during the initial research phase the tension in this small group had ripple effects into other social networks, and some of the key players. I continued moderating the workgroup and we collectively decided to pursue community food security, which eventually was handed off to a staff member at the County who was able to facilitate what became the Northern Colorado Regional Food Assessment project. Related issues of retaining power, access to land, and decision making about agriculture surfaced in these small groups and in some cases were carried forward into some community discussions, but much of it died down after this one person left the Extension to take a job with CSU. I did not attempt to address these topics of conflict with this study, though they were clearly an undercurrent.

I did not have difficulty gaining entrée, or communicating with others identified through the snowball sample. The snowball method revealed the social networks of white, middle class educated participants shaping the local food movement. These social networks did not include those populations that are typically left out: farm workers and the labor of the food system in general, non-English speakers, people who don’t have time to engage in volunteerism or unpaid mentorship, and those who currently do not shop at the farmers market or buy food directly from farmers (for the typical reasons: income, culture,

class, access, etc.). However, it is notable that farmers were the only population of this study to mention directly or to discuss farm labor when describing the food system. I did not aim to address crucial issues of local food policy, social and racial equity, or access in the food system with this study, though these certainly exist in Larimer County and deserve attention.

While reviewing and coding the data, my representation of the community of study required a concerted element of reflexivity because, “It is in at the intersection of personal relations and the field that structural relations of power become embodied” (Thorne 2001, 222). In particular, I was cognizant of my role in the construction of meaning and the “impact of the interviewer/interviewee relationship on the co-construction of knowledge” (Heyl 2001: 370). Six of the 22 interviews mentioned my role in their engagement or interest in the local food topic before the start of the research period, in the development of new local food economy projects, or in their understanding of the models from other communities. The next chapter delves into the research findings that came out of this methodology.

Chapter 4: Description of Findings

This chapter illustrates the narratives, data, and observed actions of the local food participants in Larimer County, Colorado. The following findings describes why and how people come to know about and value local food, and how – amidst what was documented by Starr (2010) to be a very decentralized group process – community leaders engaged in and created an emerging “we” of the local food movement. Understanding the process, method and nature of the rise of the local food movement in Larimer County involved answering analytical questions about place and sense making, learning situations and knowledge generation. Describing the complexity of influences on the epistemology of local food and the rise of engagement in the local food movement also involved creating a method of determining the essential features of the learning situations across and within the group. As introduction to the context for learning about and engaging in the local food system, this chapter begins with the findings that personal historical context and local food values pre-existed the rise of the local food movement, and led to catalyzed interest in the local and alternative food movement in Larimer County.

Related to these foundational experiences, I describe the settings for tacit and explicit learning situations, which took place within three different waves of food or farm related projects. These three waves of participation and engagement are an analytic construct of my own, describing the development phases of civic activation regarding local food. Using the initial frame of the three waves, the normative context for the epistemology of local food is then explained within social networks arising during particular periods in Larimer County. In all, this chapter “tells the story of how the people involved talk about and understand their connections with outside entities and forces” (Emerson, Fretz, and Shaw 1995, 138). For the purposes of outlining the data in categories, learning and consciousness processes are presented in order as possible, though the process is accretionary and often recursive. The data outlines how community of practice groups and transformative learning social settings combined to create the rise of a civic local food movement. This chapter also describes the generative and performative nature of sociological knowledge generation about the food system, the locus of meaning contradictions that arise, and how transformational learning results in the creation of new food engagement norms such as “being local”, and the emergence of locavores as “food citizens” (Wilkins 2009).

Three Waves of Participation and Engagement

A framework developed for this study describes three chronological waves of food system and alternative agriculture related projects and how they relate to the engagement in the local food system and direct market. Participant narrative, observed actions and interactions, and interview data are used to explain the knowledge process during all three phases. The data describe how people learn and re-embed local agriculture and food production knowledge and action into their community.

This framework was initially developed out of analysis of participant answers to the question set “How do you produce and share knowledge regarding food?” (Appendices A and B). Answers differed depending on two factors: when they got involved in the local food marketplace or movement, and which project sparked their participation. Sorting the data this way revealed three waves, or a timeline of how norms, values and learning situations developed. The three waves are: 1) Co-ops and community farms in the late 1970s; 2) professional and interdisciplinary involvement in local food in the early 2000s; and 3) the rise of the engaged locavore in the late 2000s. Each wave included transformative learning. (See Table 4.1 on page 49). This case study on the rise of the local food movement took place during the second and third wave.

The following is an overview of the framework of the three waves. Subsequent sections of this chapter describe the three waves in relation to the data. Those that got involved in farming and food production for local distribution in the 1970s to mid 1980s are described as the first wave in the alternative and local food movement. In this case, in part because questions for this research were about knowledge generation, the data revealed that knowledge generation and group participation was motivated by the establishment of projects to build alternative markets. First wave participants established certified organic farms, having reflected on the history of agriculture of place, and understanding the distribution end of the food system, while building new relationships with other farmers, establishing the first Community Supported Agriculture (CSA) projects, and forming marketing co-operatives. The farmer participants involved in the first wave did not relate their process of deciding to be part of the organic certification movement to their knowledge of the local food system, or to present day involvement in the growth of the local food movement, but this relationship was not a specific aspect of the interview questions.

Those who became involved during the first wave, and were still involved in the local food movement during the study period, were found to be the most linked throughout the social network and were the most linked to learning experiences that influenced others. For example, first wave participants were the most influential as mentors, teachers and advocates for those who got involved in the third wave of engagement. This group was also the first to create farm-based models for changing the food system, via changing the way they farmed (becoming certified organic), marketed their farm products (forming a farmers co-op, new Farmers' Market , and/or offering the first CSA membership shares of a farm), and shared food values (via community dinners, teaching each other to cook, and volunteering at the food co-op). As consumers and actors in the local community, they created community-based agriculture, and the first civic agriculture engagement opportunities.

The second wave of knowledge generation expanded connections established in the first, and involved a new set of players interested in action toward changing the local food system, and established stronger relationships in the local and regional marketplace. In this wave of engagement a handful of people took leadership roles and got involved in farmer-chef connections, sparked interest in food policy councils, initiated research and mapping of the local food system. These projects generated an increasingly interested community, and grew the number of new actors. During the second wave of engagement, performative instrumental and communicative learning situations increased along with a significant rise of the number of CSAs, the number of people becoming members of CSAs, and the number of groups working on food related issues. Participants reported learning on the farm, in restaurants when they asked questions about the menu, from chef's tours at the farmers at the market, from each other's local food advocate perspectives. Additionally, new knowledge was gained via national and international thought leaders, conferences, research presentations and policies conducive to local food systems. The second wave also involved the embedding of social roles and involvement of new advocates in network creation. System-level projects involved advocates from various backgrounds, who created or took part in projects that would prove local solutions during the third wave. Local food participation and learning in this wave resulted in a shift of perspective, deepened tacit understanding of food system problems. Some projects codified local food values for chefs and farmers, and created new relationships. Participants learned about broad based food system related subjects, went out of their way

to participate in gaining new knowledge, and communicated these ideas and action-based solutions to the local level situation. These experiences and new knowledge were applied to their jobs as caterers, chefs, non-profit managers, event coordinators, grocery store workers, food based businesses, researchers, or teachers, all essentially creating stronger networks.

In the third wave, participants report being a part of the local food system, whereas in the first and second waves participants reported they were motivated by certain and sometimes discrete aspects of the food system. The engagement in a systems-wide perspective involved new normative and community-based actions during the study period. We see the rise of the new group identity (the “locavore”), including the establishment of an increasing number of food-based events for community participation, ad-hock support groups, and new non-profit organizations. Simultaneously, increases in communications tools related to how to farm and connect with farmers, such as the new Local Food Map, serving an interstitial connector to the new local knowledge across groups. The community call to “be local” becomes codified in the advocate and business sphere with the establishment of the non-profit combining the Northern Colorado Food Incubator with Be Local and Local Food Group, involving the economic development and planning sectors of the City and the County.

Participants in the first and second wave become well-known leaders during the third wave, are referred to as resources for understanding the future of local food, are often asked to speak in public, or are the catalysts behind public-sphere food system related events. Participants entering the local food scene in this phase report transformative learning situations, finding inspiration from thought-leaders from the first wave, wanting to learn and to do things right, and that “being local” is a part of daily life. Farmers report a demand for more direct education and hands-on experiences on their farm. Advocate participants, particularly those under 30 years of age, are involved in local agriculture or gardening on a regular basis, either by being part of a CSA or buying directly from a farmer (or are new farmers themselves), serving on a board of a new food or farm education-based project. They are actively creating educational events, and weaving social networks around connecting to farmers and food experiences.

Collectively, these three waves explain how successful local projects established over the last few decades and the national popularization of local food provide different learning contexts for

participant motivations, actions, and the explicit and tacit ways of knowing and sharing knowledge. This data also describe how transformative knowledge generation leads to social and civic norms, discussed later in this chapter. Across all the projects and periods, social situations motivated normative activities and were the site of learning that influenced these key actors to engage in local food

Table 4.1: Three waves of local food system-based norm activation

	Project and timeframe	Key Actors	Motivations / Norm	Learning Situation
1st wave	Co-ops Community Farms Farmers Markets 1970s – early 1990s	Organic farmers, Operating outside system, Cohesion around building alternative markets	Marketplace Inefficiencies lead to market opportunities; Changes in distribution systems; Certified Organic, sustainable agriculture; Close knit community; Anti-establishment	√ Informal knowledge sharing amongst farmers is instrumental and communicative √ Direct connection to consumer
2nd wave	Farmer - Chef Connections Farmers' Markets Food System Interdisciplinary Food Map 2000 – 2005	Researchers Students Chefs Farmers Sustainability Advocates	Chef-farmer advocate linkages; Research for professional and personal interest; New forms of social capital; testing new models & evaluating successes & failures	√ Analysis shared by advocates engages broader group √ Formal and explicit knowledge sharing √ Diffused farm and food source learning sites
3rd wave	Food economy, (Be Local Northern Colorado, NC Food Incubator), Gardening and CSAs Engagement 2006 – 2010	Rise of the civic "Locavore"; 1st and 2nd wave participants as mentors and teachers; Community call to "Be Local"	Consumer becomes participant; Rooted in place; Social network/ community expansion; Evidence of change apparent to participants; Mainstreaming of the local food movement	√ Ownership of local knowledge √ Transformative knowledge generation via 2 nd Wave tools √ Systemic and place-based thinking √ Ability to document and share knowledge with larger networks

The First Wave

The following section outlines the first wave of organic farmers who began operating outside the existing distribution system to build alternative markets for themselves and other farmers, and who established the farmer co-ops Farmers' Markets and the first Community Supported Agriculture (CSA) membership structures. The key modes of learning during this time were instrumental, as people acquired new skills or information, determined cause and effect related to the problem, gained new scientific and technical knowledge by performing task oriented problem solving. Farmers found ways to manipulate or control the environment in a hands-on engaging way, which follows Mezirow (1995) theory that this allows the learner to assess truth claims. The grounded categories of instrumental learning related to food systems identified by Kerton and Sinclair (2010) include how people gain new understanding of potential risks and impacts, understand biophysical interconnectivity of systems, personal health, and ecosystem health and climate change.

The first wave of the alternative and local food movement engagement, as reported by participants, happened in the mid-1970s to late 1980s, and was mostly farmer-based. Groups formed out of need when the organic produce marketplace was changing. A growing national interest in forming Co-ops led to new group collaborations: the first wave involved the establishment of the Colorado Marketing Association Cooperative (CMAC), the first Farmers' Markets outside of Old Town (the longest running Farmers' Market in Northern Colorado, operated by the volunteer Master Gardening group, a project of CSU Extension) during this time. The first-ever member-based Community Supported Agriculture (CSA) farms sprang up, along with new social networks. Some of the farmers interviewed set the direction and culture of direct marketing in the region.

Four of the farmers and ranchers interviewed had over 25 years farming experience in Colorado, as this gentleman expressed: "I grew up there and came back here for college. Did my bachelors in agronomy and farmed for 10 years and started growing organic vegetables in addition to row crops. My folks had a cow cattle operation in addition to that, so we did a pretty big organic vegetable farm." (mF-05, farmer). Each farmer interviewed who was also part of this first wave described the path to marketing local and direct as beginning with the frustration of the national distribution of organic products that was

expanding in the early 1980s. Their Colorado-grown organic product was put on trucks, shipped to other states, and then, the same product would show up on local shelves, as this man describes: “We’d fill a semi with it and send it off and about a month later it would show back up at the [Fort Collins Food] Co-op with our little tags on it (laughs). Yeah, it was pretty funny.” (mF-05, farmer). At first, they laughed at the incongruent logic of selling organic product to a distribution company that would ship it to other states, and back again, but then they were frustrated. “And we were dedicated at that point and focused and interested in local food cause we were outraged in 1980 that we were importing food across the country that could be produced right here.” (mF-05).

Co-operatives

In discussing the first wave of engagement, farmers and activists reported learning through participation in co-operative marketing, in parking lots and in grocery stores. Farmers mentioned a deepening relationships as a result of their first direct marketing projects, and a new sense of what was historically possible to produce in the region, as well as how the larger industry impacted the local food production.

We’d met some old time market farmers that had marketed [their product] right here. LaPorte use to be famous for celery and strawberries and used to grow raspberries on a pretty big scale up and down the Front Range, and cherries used to be grown in Northern Fort Collins. There was a cannery near Masonville. So, there was a real diversity of perishable produce grown here even before refrigerated trucks came through from the coast. (mF-05, farmer).

The idea of starting more Farmers’ Markets blossomed after learning from other “old timer farmers” who ran truck farms selling their product off the back of the truck. The then-young farmers learned about truck farming and direct marketing from the old timers. Historical perspectives increased their sense of possibility for local production and marketing.

There weren’t a lot of marketing options back then. The impetus [for the CMAC] was a marketing outlet for local growers. You had to be the producer of everything you sold. It was a strictly produce market. There weren’t a lot of animal products being produced from local farmers. Fruit came in from the western slope but you had to be the grower of it to sell at our market.” (mF-05, farmer).

The Colorado Farmers’ Marketing Cooperative (CMAC) formed as a co-op for local producers to market and promote local products, and continues to operate as a farmers’ market to this day. The CMAC was born out of a strong social network, as reported by farmers and others who were early members.

We helped to start the [CMAC] Farmers' Market because there was about 15 of us living on two properties and we had our own large garden. So, we all shared in the gardening and cooking and food and it was a great opportunity for us as young people to have a lot of wealth of wonderful fun experiences. We made tofu, made our own soymilk, canned vegetables together, we shared festivals together and that we have kind of taken into this life now, too. Everybody started having kids and getting married and some moved on to the next adventure, but several people are still really close. (fF-09, farmer).

Involvement in the still-new Fort Collins Food Co-op was also the site of a new social scene at this time, shaping what those involved with it knew of the local food chain. Couples formed out of relationships built at the Food Co-op. "I was working at the Food Co-op on Mountain Avenue when I met [my husband]. We shared bicycling, that was our first love, and then gardening and then farming" (fF-09, farmer). They went on to start the first Community Supported Agriculture (CSA) farm in the area. Another man, reflecting on the fact that his social network with other farmers has changed, said back then it was stronger because of the Food Co-op. "We use to have a lot potlucks. When I was involved with other farmers in the Food Co-op, too, so there use to be more interaction. There was a small group and we were very socially involved with each other. There were a lot of food events." (mF-05, farmer).

Gaining knowledge of the historical context of local food also gave those who participated in the first wave a unique sense of what is local in relationship to the farmers' network statewide and the crops historically grown in certain regions. For example, a farmer who has statewide social networks said, "I consider Peyona and Palisade peaches to be local, because it is within your reach of where you spend your time, the people you commune with, the people you see at the store, in schools. That's what I consider to be community and local" (mF-05, farmer). This shared sense of history, relationships, and the geography of food production was carried forward by the first wave participants to the second and third waves, creating a strong sense of place and embedded knowledge.

Foundational Experiences

The constructions of language (which is to say the constructions of thought) are formed within experience, not the other way around. (Wendell Berry 2000).

In the rise of the local food movement, we see that historical and personal contexts and existing values lead people to readily take up new ideas and begin new projects, which create the setting for informal learning and new social networks. Participants - the "movers" of change at the local level - reveal

the place-based and sociological nature of the epistemology of local food that led to the new rise of the “locavore”. For food, the local is where producers and consumers build new networks of relations (Goodman and DuPuis 2005). As the responses show, asking participants, what is local mean to you?, and How did you learn about local food?, revealed that people entered the learning process and come to an understanding of the problems of the food system first by way of knowing at a personal level. For many, the connection to their own family or history of farming or homesteading provided the foundational experience and tacit context for understanding industrialization and impacts of globalization that resulted in their turn toward valuing the local more highly. Most particularly, like “the knowing self” (Howells 2002), these values were expressed as a part of personal experiences and familial history, and tell the story of identity formation in relation to the production side of agriculture. Across all categories, interviewees (chefs, farmers and advocates) referenced in some way that they learned about farming, gardening, or felt connected to food in some way, either in childhood, from family members experiences such as gardening with grandparents, and/or from growing up in a rural community.

Every participant reported gardening for his or her own use, or being part of a CSA. As described later in this chapter, involvement in the local food movement also sparked many new gardening projects, events related to celebrating gardening and farming, and the idea of a downtown marketplace for downtown economic development, as well as new farmers and food entrepreneurial interest in being involved in the local. In addition, while the present-day motivators for taking action and being engaged in food differ, family histories bind them together. Those participants who were connected to farming report that the demise of the family farm and consolidation in the food system influenced their turn toward local food in Larimer County and on the Front Range. For example, a direct market and CSA farmer in his early 30s shared how growing up in a rural agricultural community affected his family, and shaped his knowledge of the how a local food system works.

My first contact with local food was growing up in Wisconsin in the 80's. When I was growing up it was very common for cheese factories to be within every ten miles; it was so concentrated with dairies. So, 10 square miles or even less there would be 'x' amount of dairies going to one cheese factory. And then the next town there would be another cheese factory. That was my first connection – here is a farmer and here is a trucker bringing his milk to the cheese factory and here are the stores or the grocery stores in town would always have cheese and still do. So that was my first connection of thinking 'wow, this works; someone's making it, someone's producing it, someone's making a product, someone's transporting it, and someone's washing it, bottling it and then someone's selling it.' I remember liking that. (MF-04, farmer).

As he grew up, the agriculture of the region started to change, and his family was affected by shifting agricultural policies. “Then the cheese factories started closing down. Then there was one big one in a five county area. I remember thinking of the delocalization of food. I saw it happen and people like my brother lost his job at the dairy.” (MF-04). Having observed agricultural and economic changes, and then later seeing the rise of multi-national corporations as an adult led to a “feeling of anti-establishment”. When he had an opportunity after college to be an intern on a farm and feed people locally, he said “it was like fitting the solutionary pieces of the puzzle together”. He has been farming ever since.

Similarly, a chef in his late 50s in Fort Collins who is well known for his business's emphasis on buying produce from local farmers, said that his childhood experiences created his present-day interests in supporting local agriculture through his food business.

I grew up in a small town surrounded by Farmers' Markets, farmers, and food service folks. My family had a catering business. At a very young age, we always went to Farmers' Markets. I would always help with farms as a kid, not as much to get paid, but to help friends. I was always involved with food. I guess it's in my blood. When I decided be a chef, to go after a career in food service, I found myself always linking to the farm community, and this was before the movement came along that made chefs famous for being connected to farming. This, for me, is just a natural way of doing business. I would say my values are just good, solid, healthy food. (MC-01, chef).

People also related why they got involved in the local food movement to their familial farming or gardening knowledge settings, and a nostalgia for a time when community, and jobs were related to local food production. One participant said simply that he thinks of local as a shorthand solution for the long list of things that are wrong with our world today. Another chef, a leader amongst farm-to-table restaurants who has a strong relationship with farmers and ranchers explains, “I was raised that way, with farm stands on the side of the road. It almost seems weird for it not to be that way. When you see all those places going with the cheapest, largest quantity, why would you do that when you have all this beautiful stuff right here?” (MC-03, chef). Farming and gardening experience is related to becoming a local food advocate.

Identity, Values, Culture

When asked about the values and components of a local food system, and the source of the concept of eating locally, the most common answers related to choice, community, and agency, as

participants came to understand impacts of their actions at a local level. For example, the following quotes indicate how reflexivity shapes the sense of identity once involved in the local food movement:

The value is that you see the consequences of the choice you make when you consume food, which is arguably the most fundamental consumer choice you make on a day-to-day basis. If you have a strong local food system than the impacts of your choices are visible either in a good or bad way. If you're part of the industrial food system you have no idea where your food came from, where its been since it was harvested, who touched it, what has happened to it, how it was raised, what the landscape it came from was like before it was raised there. You don't know anything about any of that and I find that understanding your food is so important because its so fundamental to who you are, to everything, and, all culture seems to stem from food (MP-05, advocate).

I think there's a real strong commitment among most of the local producers to provide local markets to their product. Not only is it advantageous for them to do so, cause it provides an economic payoff when there's no middle person, but also there's a strong feeling we should be providing our local communities with our products made here before shipping them off. (MF-05, farmer).

Across all groups, those that are involved with the local food movement relate their values to hands-on experience gardening or farming. Values, based on new knowledge about local food, influence decision-making and lead to the reasons reported amongst all the participants for why they want a local food system. All interviewees expressed that the values embodied in the local took precedence over cost or certified organic label in terms of decision-making. Similar to the consumer behavior for direct food purchases findings of Keeling-Bond and Thimany (2009) and of DuPuis and Gillion (2009), personal interactive relationships with producers and the sense that organic certification is associated with industrialized food, reduced the need for third-party certification. For instance, a farmers market manager first says that local in concept is about distance in miles, then goes on to relate the philosophy of trust displayed by the direct market shopper:

I think a lot of people are reading about it in the literature, and learning about carbon footprints and the salmonella that came from Mexico or California. There is a feeling that if you have more face time with the person growing your food, then you trust him a little bit better. If you have a problem, then you know where that person is. There seems to be a mental feeling of security. If you buy it at a grocery store, you have no clue where it came from or how many people handled it or what. (f-P-09, advocate)

In the local food movement, values such as nutrition, relationships and support of the local economy have more importance than price.

Chefs feel they play a particular role in the food system, as they negotiate the tensions of seasonal product availability, and as they forge relationships with farmers in the area. They, and the

farmers they work with, take great pride in representing the farm and local food quality in the output of their work. Farmers describe educating chefs about the realities of the farm while working to accommodate the on-demand needs of chefs. As described later in this chapter, these data indicate that chefs play an important conduit role in negotiating quality, taste and are the intermediary between the farm and their own business values.

“Everything is so packaged and shot out of a gun, so we try to offer clean, simple really good health alternative and educate people that you can get local food at a restaurant” (mC-01, Chef).

Despite findings to the contrary in Colorado State regarding sourcing local food (Starr et al 2003), the local conjecture is that convenience (distribution, complexity of sourcing from many different farmers, seasonal restrictions) remains the top issue related to sourcing local ingredients. Based on observations and interviews, relationships may be restricting statewide sourcing and reinforcing sourcing myths. For example, some chefs mentioned distribution companies with whom they have existing relationships as important to include in the list of those who are influential in the local food system. Meanwhile, farmers and advocates related that locally owned and operated distribution company was the biggest hole in the local food economy. The most common critique from retailers and chefs is that they cannot source enough local products with consistency. Chefs are conscious of the trade offs they make when they choose non-local ingredients, but other values balance those tradeoffs, like flavor and quality. Having described foundational learning that set the groundwork for engagement in local food, we next turn to second wave.

Second Wave

The second wave of projects arose out of advocate interest in getting involved in the direct market with farmers. This wave engaged individuals who worked for, or in some way were affiliated with Colorado State University, or with the food industry. New farmer-chef connections created new community-level linkages. Learning situations in this phase were mostly informal and communicative, generating tacit and codified knowledge about the problems in the food system, and solutions that could be enacted at the local level. Events and projects taking place during this time indicate the beginnings of

civic engagement that nurtures practices and changes normative behaviors. This wave of participants, once engaged, become significant players in the third wave and are amongst the first activists working at the system level.

During this wave, one such project was Colorado Crops to Cuisine (CCC), connecting farmers with the chefs that were seeking local and fresh product, and brokering and delivering the product to restaurants. Chefs reported collectively broadening the sense of the role they played in the local food system after participating in this pilot project spearheaded by one of the key food citizen advocates, Colorado State University (CSU) agricultural economics professor, Dawn Thilmany-McFadden. (Dr. Thilmany-McFadden consented to be named in this study of otherwise anonymous players. As the instigator of one of the projects that lead to changing the relationships in the food system, and snowballed into additional projects that influenced the rise of the local food movement as it is known today in Larimer county, naming her is significant context for praxis and for understanding the role of key players within this case study.) Notable in relation to knowledge generation and the role of CSU, Howells (2002) writes that the context, and who benefits from the knowledge, support for new knowledge uptake and innovation, and the social division of labor each influence the absorption and transferability of knowledge. For example, the CSU University Extension plays an institutional interpretation and filtering role for farmers, separating the practices of small/direct (usually row-crop) and large/industrialized (usually commodity) producers, further constraining codified knowledge by division of practice. Sustainable and alternative agricultural practices implied in the local food movement rely on knowledge spillover via organizations, and in this case, innovative projects such as the CCC.

Reflecting on the project, Thilmany-McFadden said she was inspired to focus her research on the local food economy niche with the direct market producers because they were willing to try something new. In a recorded interview, she related how she came to value working on direct and local market topics:

I felt these producers were far more embracing and engaged about new ideas and new knowledge, whereas some of the traditional ag circles seemed to me very pessimistic and fatalistic about the future. It seemed like you can tell them whatever you want, but they think it's not going to get better, or change. Whereas, this group [of direct market farmers], they just sucked up information and were energized by new ideas (Thilmany-McFadden).

Ultimately, the study aimed at connecting chefs directly with farms and studying the economic impact of local agriculture met an unfilled academic niche. However, at the beginning, farmers participating in CCC didn't know what to think of the idea of personal foraging for chefs, or what to think of an academic playing a role. Here, Thilmany-McFadden describes how the project generated her own knowledge of local food academic studies, relationships with farmers and chefs and gained her social capital in the community:

Colorado Crop to Cuisine kind of threw me into the fire because I had to get to know all the people who were at Farmers' Markets, and got to know the chefs that were interested, too. All the producers looked at me as if I was nuts. From then on it just grew and I was seeking out case studies in Iowa and Wisconsin, and it just put me into reading about a whole world I never knew existed. It indirectly put me in touch with people who thought it was a really cool idea. I was doing deliveries to chefs myself, and going out and helping people harvest when there was a problem. I think that got me some credibility with the producers, and then I was immediately embraced by everyone thinking I knew producer context, plus I had analytical skills.

Colorado Crops to Cuisine bridged the distribution gap for small and direct market producers and formed new relationships that didn't exist before the project. Chefs learned which farms offer which products and when, connecting them more deeply to a sense of seasonality, and of place. Some farmers also professionalized their market exchange tools as a result of a closer relationship with the chefs (e.g.: using fresh sheets, a communication tool familiar to those buyers who order from distributors). An additional theme that came out of the snowball sample of this research is that the CCC project initiated new market relationships between farmers and chefs during the project period. Many of those relationships remained in place years later, as evidenced by the reference to the chefs who had participated in CCC when I asked the interview question "can you think of anyone else I should interview on this topic?", or "who do you think of as a key player?" All chefs who participated mentioned CCC farmer participants. Additionally, through participation in the CCC project, the chef/owners and cooks at these restaurants are known in the community as supporters of local farmers. The project lasted nearly three years, and did not continue after grant funding ended. However, this study notably reveals that the chefs who participated in CCC or who had experience with similar direct from small farmer sourcing have the strongest social network. They were the most recommended as key players in the food system during the snowball interviews. Interviews and observations also indicated many of the farmer-chef relationships

established through the CCC project were sustained. Further findings below indicate that the relationships established through this project would later become anchors for trade and informal knowledge generation.

Types of Learning During the Second Wave

The second wave involved local advocates engaging in tacit knowledge building and analysis, and the new social networks with farmers that grew out of these projects cultivated new relationships that reinforced the sense of convergence of topics. Informal learning and periphery group interactions, where individual and group dialogue of every day life occurs, such as over a restaurant or at-home dinner or at the farmers market, happens a guest observes new practices of using ingredients or otherwise gains new knowledge through observations. Every one of the interviewees mentioned they learned about local food and built stronger social networks at the farmers market. As with other areas of learning about the local food system and infrastructure, knowing the history of the establishment of the Old Town Farmers' Market put the current concept that Farmers' Markets are set up to support farmers in context with the original history of the market. As they learn more about the system, participants negotiate their values and perceptions, testing ideas, as described here:

I think the Farmers' Markets have been important. It is interesting to me that Extension runs the market because they are in charge of the Master Gardener program. Old Town [farmers market] was started as a fundraiser for master gardeners. That is interesting to me. Part of the tension now about having more local food there is because the market didn't originally have to do with farmers and supplying food. (fP-02, advocate).

Hands-on instrumental learning happened at the Farmers' Market in many ways. Chefs played an important role in linking the consumer to the gustatory experience of new ingredients, linking the flavors to new knowledge about the farmer, seasonal varieties and place. Farmers mentioned that when chefs reference their products as ingredients, consumers recognize their farm's names at the Farmers' Market and new consumer-farmer relationships are established, building a stronger knowledge network about local food. Direct market farmers who sold to chefs reported they are more likely to build new customers from those that eat at the restaurants that talk about each farm's ingredients. One farmer, who started farming in the first wave, said now she feels that her only and best option is to market direct and locally for this reason.

“We talk about produce more than anything else in our restaurant. We talk about the importance of organic and the health aspects of food: fresh, quality. And, I think our efforts to buy from farmers keeps the money, too, in the local playing field as opposed to people at the top have the most” (mC-04, chef).

After tasting prepared food in these restaurants or in cooking classes, the residual taste and memory associations of the farm-to-table story becomes part of the local food experience. Observations of chef and eater interactions at the Farmers’ Market and other events also supported these claims. The process of farmers and chefs working closer together also brought a new level of awareness of the local possibilities to all parties, by way of instrumental and communicative learning.

Second Wave Formal and Explicit Engagement

Without engagement or some other embedded memory, food easily assumes the role of a “thing” – something quite separate from the living system that produced it and resides within it. The separation of the consumer (and often the producer) from the thing consumed, then, not only permits the compartmentalization mentioned above, but with little other than an assortment of discrete and prescriptively assigned attributes to bind the system together, encourages the consumer – and, however ironic, the “informed” consumer especially – to slip into a pattern of narrow self-interest. (Delind 2006, 125)

Projects, and the social network built around new ways of relating in the local food system, created new knowledge and skills that participants would later think of as innate. A number of food based projects took root during this time, and had long-term engagement ripple effects. A handful of people who started the Colorado Crops to Cuisine project also worked with the (then) Extension agent and other advocates who collectively coalesced the idea of the Northern Colorado Regional Food Policy Council. Another few people who started the Fort Collins Food Co-op, got together with a few from this Food Policy Council group, a few others who were on the board of the Rocky Mountain Sustainable Living Association (RMSLA) to form a subcommittee of RMSLA which started the first ever mapping of the local food system in Larimer County. The outputs of these projects included explicit communicative and instrumental knowledge tools in the form of fresh sheets (CCC), and sample local food policies that could be acted on a local level (Food Policy Council), articles of incorporation and operation for two significant co-operative establishments (CMAC and the Fort Collins Food Co-op), and the food map project would later spawn the “Be Local” the Northern Colorado Chapter of the national Business Alliance for Local Living Economies network.

The first-ever mapping of the outlets selling local food engaged a small group on a volunteer basis who delved into understanding the value chain and relationships involved in distributing farm product to local stores and outlets besides Farmers' Markets. I was a full participant in this project, volunteering as a Rocky Mountain Sustainable Living Association (RMSLA) board member, when another board member returned from vacation in Bellingham, Washington with a food and farm map from in hand, saying "we have to do this here!". In 2005, we started what would later be called the Be Local Northern Colorado project. It began with the notion of mapping Fort Collins local food and farms, using the Bellingham map as a model.

What is Local

Participants view the term local as open to definition based on relationships and group knowledge generation. The complexity involved in attempting to codify it seems to give the participants a new frame of social network reference to express their way of knowing. The manager of the project describes that the breadth of the definitions we discovered through this project caused her to consider the lens she used within her previous work in forestry and land-use:

"What is local? It is one of the more complicated five letter words in my vocabulary now. Well, it seems to me that local in terms of food is about both geography and ownership" (fP-02, advocate).

As participants brought their own local knowledge to the creation of the map and added their own sense of which farmers sold product where and in which seasons, we quickly realized how hard it would be to describe who is included in "local" and who is not. The personalization of the epistemology of what is local is powerfully engaging. For example, the intent of the mapping project was to connect eaters with farmers and the outlets where people could buy local food. Would we include farms that bring product to the food bank? How will we find out where all the food goes so people can buy it? Group agreement was gained after the CSU Center for Fair and Alternative Trade Studies (CFAT) confirmed they would sponsor part of the map, and other subsequent sponsorship funds allowed the project to hire the (then) CMAC Farmers' Market manager to work with the farmers and to map the food outlets where area farmers sold their food in Larimer County. That way, we thought, the farmers would be creating the map, and who got

included in the definition of local was clearly about where you could find local food. Here, the instigator of the mapping project described the learning and values that grew out of the group mapping process:

We decided to map the outlets, and ended up with a modified the state-wide focus, mostly to give the nod to the Western slope. You [referring to the researcher] reminded me of Steve Ela and their West Slope peach farm's role in our summer local food culture and community. Then we needed to add a little bit more to the picture because there were new community gardens coming on the scene. Nobody else was tracking that so we threw that on the first map. And then, you reminded me about the food banks and so we threw them in, too. Then, we heard we needed to include King Soopers, Albertsons and Whole Foods grocery stores on the list because they were starting to feature local farm products, though we didn't feel the need to map them because they are big chains that don't need promotion. (fP-02, advocate).

The mapping project was a pivotal and important source for instrumental and communicative learning. However, that instrumental and communicative discovery process, and expansion of the social network only extended to a small group of players who created the tool. Most other people reported that they did not use the map for their work or on a regular basis. When asked, participants of all types reported they seldom or never used printed educational materials. However, one interviewee said she used the map: "I use the Eat Local Map. It's a great tool. It's a huge visual. I mean, I'll take people [to the bookstore that sells them] to show the map so that people can get that picture of what's happening here. And people really get excited." (fP-03, advocate). Despite the reported low use in 2008, the local food map creation played a role in the community's sense of a rising movement. Many farmers, when asked, said the food map and the effort put toward documenting the food system was evidence of the growing interest in their food and agricultural values. Some said it could influence the viability of their businesses or projects. Farmers reported they were encouraged by the growth of the Be Local and living economy projects taking off in Larimer. Farmers also said (with one exception) that they did not feel directly involved in the new local movement that created the map.

Third Wave

The bulk of this research took place during the third wave, and thus includes the bulk of the findings. As discussed previously, a confluence of local food projects were under way in the Front Range and in Larimer County from 2005 when I moved to Colorado to the end of the study period in 2009 (and they continue to this day). New farmers and farm-based projects entered the scene, at the same time

national media attention about local food increased. Diffused learning and project specific sites increased the ways in which people can engage in the call to “Be Local”, and many projects mobilized more local food participants. Communication tools such as listserves, newsletters and the local food map and relationships established in the first and second waves offer social capital and explicitly instruct the new “locavore” way of living for the third wave. Consistent with Mezirow (1997), transformational learners move toward a frame of reference that is more inclusive, discriminating, reflexive, and integrative of their local impact, and of their social network. Communications within social networks revolved around doing things the way things made the most sense for the food system, based on local knowledge. Active efforts to establish culture, and local knowledge deepened during the third wave, and revealed an understanding of systemic complexity, and a new “Be Local” food participation norm.

Instrumental role of CSAs

To become meaningful, learning requires that new information be incorporated by the learner into an already well-developed symbolic frame of reference, an active process involving thought, feelings, and disposition (Mezirow 1997, 10).

Collectively, the establishment of the Farmers Co-op Farmers’ Market, the Food Co-op, the CCC project, and many CSAs – particularly Guidestone Farm (western Larimer County), Happy Heart Farm (urban Fort Collins), and Crescent Farm (southern Larimer) – were crucial sites of learning for those involved in these groups at their formation stage during the first and subsequent waves of engagement. Working at or being a member of a CSA is the main entry point for instrumental learning about the food system (Kerton and Sinclair 2010). Participants reported a growing collective sense of the food shed as a result. Further, as people created community connections, new cultural food habits formed.

When you are meeting producers and chefs and making connections between the two, and they are teaching how to use new ingredients, and to re-explore what food is, it becomes part of your culture. It almost has become a hobby to connect with the seasonal offerings of local farmers. You know, I even grew up on a farm, and knew how to cook but I was still defaulting to Hamburger Helper, and those premix things. It doesn’t take that much more energy, if you have the right knowledge and people teaching you to think of food as part of your culture again. Working with farmers and chefs engaged me personally and professionally (fP-01, advocate).

These projects created the critical conditions for local knowledge generation, leading to the next phase of expanding engagement in food citizenship. Additionally, all participants in this study reported

being involved in some way with a CSA farm. These direct market farms are overwhelmingly reported as sites of learning as members took on leadership roles, or worked-off a discount by getting their hands in the soil caring for plants. Direct market farmers are the source of the most reported relationships amongst community members, neighbors, via farmer-to-farmer information sharing and farmer to customer interactions. As one advocate (Fp-08) aptly summed up, “You definitely gain an appreciation for the farmers and how hard they work when you know them.” Many CSA members pick up their shares at the Farmers’ Market, and do additional shopping while there. Advocates are members and volunteers on CSAs. Chefs and caterers all report buying from a CSA farm, thereby enhancing the learning network and sense of the growing movement. CSAs also have woven stronger social networks amongst farmers. By chance, and perhaps because of the snowball method of identifying the social network of key players, all the farmers interviewed have CSAs as part of their business model. Of those who had been operating for more than one year at the time of the interview, all said they looked to the other CSA farmers as a source of information. They said they also look to other farmers as the main people who educate and share important knowledge within and about the local food system. Farmers report members learning from and teaching each other, even in the (sometimes) absence of codified materials like newsletters that most CSAs typically use to share on-farm information with members.

Q: How much education about the turkeys and chickens have you had to do with the new CSA members? A: “A lot – there is such a wide range of people in the CSA membership. Some people know more about turkeys than I do. Some people think they’re born with little plastic things in them with the thermometer. Most people are good about understanding the difference with heritage turkeys, why they’re smaller or why the meat isn’t white and stuff like that.” (MF-06, farmer)

Happy Heart Farm, the longest running CSA in the region, is run by Dennis and Bailey Stinson. This CSA was the most referenced by all participants, indicating and reinforcing the communicative nature of the social network and of CSA experiences. Even amongst farmers, the CSA model played a crucial role in developing the epistemology of local food, as this first-wave farmer (mF-06) mentions:

I think Dennis Bailey and some others are key. They keep encouraging people to support local farmers. They asked me to come visit and talk with them and their members. A few other friends wanted me to talk as well, so they were key. Colona Community Farm has been promoting [my farm products], too.

A young CSA farmer, who is relatively new to the business model and to working for one of the larger CSA farms in the area, learned that a “code of helping people” was integral to their CSA, and to the

farm functioning well. This code, he said, is evidenced in neighbor relationships strong enough to regularly borrow equipment and trade crop and production knowledge. Both the small-scale producer and the largest said they found the CSA model offers flexibility for a diversified market outlet and an enjoyable level of autonomy.

A [CSA] member has a lot of opportunity to see how food is grown and to see a reason to buy locally because you're support somebody you know- there's a real tangible connection between consumer and producer. That direct marketing aspect is part of it, but also it offers the connectiveness [sic] of learning what our environment can offer us here and we don't need to rely on offshore or very distant production systems. (MF-05, farmer).

Guidestone Farm, with over 100 acres in the Front Range foothills, was the biggest direct market and educational farm at the time, and created many of the foundational experiences that study participants reported. Guidestone Farm's CSA had 100 members, offered workshops, educational camps and trainings. (They moved their operation about 100 miles away during the second wave.) Their dedication to community engagement and education was well known, and inspired others to farm.

Guidestone was equally as large but in a more diverse and grander scale in terms of doing a fully diversified farm project that is trying to support itself—doing a small dairy and growing all of the hay for their dairy and raising the crops for their lamb and pork and raising chickens and planting fruit and doing the garden. Doing it all right there—and bringing education into it. So I think Guidestone was real—you know they were there before it was hip. And now there seems to be a lot of key players that were influenced by the experience there. (mF-04, farmer).

Seven (7) of the key informants mentioned Guidestone as a transformative learning place. For three (3) farmers, Guidestone Farm was where they got their training, or interest in becoming a farmer. When the farmers than ran Guidestone decided to purchase land and move their operation a few hours away, it had the effect of moving CSA shareholders to other farms (which incidentally may have been the reason why CSA farms experienced unprecedented demand in 2008). Despite the gain in members, farmers mentioned that they missed the community glue that Guidestone represented to them. A beginning farmer in her late 20s related how she decided to change her life direction, get training and start her own farm on the former Guidestone site. As she describes it, after finding out about the growing national interest and locally popular demand for grass-fed beef she was inspired to start a new business on the Guidestone land, next to where her family runs an intentional community called Sunrise. Here, she

describes the process of being educated with nationally-famous farmers that led to her decision to start farming:

The shift was about starting to really own it, and study how do I want to farm. I remember going to the *Acres* magazine conference -- someone gifted a \$1,000 scholarship to me and my husband. We got to hear Joel Salatin speak and meet all the people we had been reading about, we got to see them in person and ask them questions and then it was from there that I went into this course of study, and now I'm managing 120 acres. (FF-02, farmer).

The trend of farmers joining the direct market wave, and getting out of bigger and export markets is found to apply to more than just produce farms. When asked who else should I talk to, four of the farmers interviewed suggested a dairyman that provides raw milk to their CSA shareholders. So, I went to the outskirts of a small town north of Fort Collins to see the quiet voiced dairyman with salt and pepper hair. He introduced me to his 12 cows first. The names of those calmly chewing their cud in the small milking room and creamery are Oreo, Helga, and Jezebel. The rest are out in the field. He said he got started running this dairy after running one of the biggest dairies in the region for over 20 years.

"We had a dairy and it got just unprofitable. We were 18 hours a day just the both of us and still couldn't make ends meet." (mF-06, farmer).

When the state law changed to allow direct sales of raw milk, he decided to jump off the treadmill. For the last three years, he has run his own raw dairy of no more than 20 cows, an ideal size, he says. With the help of two teenage neighbor boys, over 350 raw milk shareholders are part of the farm, picking up returnable half-gallon mason jars from the refrigerator in the creamery across the driveway from his home. Some milk shares are delivered via three other CSA farms. I asked him, "Do people talk about why they are willing to make the trip out here to pick it up, and pay the extra money?" He said, "Because, it's a better product. They feel in their hearts and they trust me. You build up a relationship with them and... it's nice. It's really good (mF-06, farmer)."

Speaking reverently of cows, the nutrition of raw milk, and the production capacity of cow's digestive systems, he related that joy for him is working with a small number of animals, and the social network.

The nice part of this type of business is that we were never able to enjoy before is the people, the community, and the neighbors. Before you heard nothing but negative comments about milk fat from people and newspapers - 'it's no good, it's got fat' they would say. Plus, we were working hours upon hours, day after day. No days off, and still losing money. It was like 'why are we doing this?' This now is just the opposite. It's great. I enjoy it. (mF-06, farmer).

Later, during an interview at another farm, one of the other younger vegetable farmers that offers milk shares to his CSA members mentioned to me as we were walking his fields that this dairy producer sums up the sense of a rising tide and a changing food system. He said that if dairy could survive on direct market, limited by the state law to word of mouth marketing, with only about 350 people as members, that alone is an indicator to him that consumers care about buying directly from local farmers.

CSAs establish the social network, by way of the values these farmers bring to their food production and share with their members. CSA farmers all reported a stronger social network within the last few years, and that they learned more about other farms during the third wave. This study also found that in 2008 and 2009 CSAs were increasingly incorporating other farm's products to distribute to members (now a national trend), thereby educating on the diversity of farms practices, and regionally available food. Here, farmers describe how their relationship with peach farmers from west of the Rockies makes sense for local CSA distribution:

Our [definition of local] expanded a little bit because once then we got that CSA market base, we can't really grow fruit over here, but they want it. You know, we get these arctic outbreaks. But a good friend of ours is over there [on the Westside of the state] with his organic fruit and he brings it over to the Farmers' Market. So now we've got our vegetable shares, but we also market fruit shares and they're Steve's fruit shares. So we consider that local Colorado produce since fruit can't grow over here. (mF-07, farmer)

I have a strong affinity for people growing peaches in western slope. They have a long history of supplying fruit to this region and its such incredibly good fruit. It has to be local for anything to be so good. They pick it tree ripe and we can enjoy it. (mF-05, farmer)

As people made direct relationships with the farmers, they broadened social networks in relation to place-based and climate appropriate food sourcing, and CSAs became a foundational learning site. New social networks also assured farmers of market for CSAs, and increased farms as a distribution point for local food for multiple farmers. CSA farmers during the second and third wave report an increasing interest in people wanting to volunteer on their farms, and most reported they plan to offer more education to people of all ages.

Becoming the Teacher

Communicative learning plays an important role in deepening a pattern of relating values across the social network. In the case of understanding food, Kerton and Sinclair's (2010) categories of communicative learning include understanding and validating ones own purposes, insights, values,

morals, beliefs, and feelings through process or discourse, or engaging others. This type of learning involves first becoming aware and then being able to interpret and validate what is being communicated through discourse (Mezirow 1997). Various forms of communicative learning about the food system took place in settings conducive to interaction.

The set of questions, “How do you produce and share knowledge regarding local food?” (See Appendix A: interview guides) invited participants to describe their involvement in the alternative discourse, how they share and communicate their understanding of that knowledge, all in the category of communicative learning. For example, many farmers were clear about their education role:

The best way to educate CSA members is here at the farm for events. Once those people know, the more they'll talk about. The more people hear something, the more likely they're going to think it's credible, and look into it.” (mF-06, farmer)

Farms provide structure for educational learning groups and offer in person hands-on instrumental and communicative learning that has often led to transformative learning processes (Kerton and Sinclair 2010). Members of CSAs have the opportunity to learn hands-on about farming, and then to learn again about community and the social networks connected to the farm, and gain new knowledge a third time as they prepare the food. Hands on learning is reportedly in demand.

I would say in the next 5 years we will increase our capacity for teaching at the farm because there is that demand. What we're looking for are sources to support us to do that education because at this point, teaching people how to be farmers is not valued enough in our culture to drive that financially. And, that incredible knowledge needs to be passed on to people. Especially so the farm can pass on that knowledge- specifically to new farmers. I think the demand for good food is growing exponentially. In the next 5 to ten years, who are going to be the people to grow that food? I don't think on-farm education is growing as fast as it should. (fF-09, farmer).

Health, in terms of the soil, the animals, the people producing the food, and the health of the people eating the food was a reported driver for communicating with others about the food system. Chefs in particular reported that nutritious food was personally important to them, and was integral to their engagement in the local food movement.

If you are a sick person and all you get is Meals on Wheels, you get canned chicken noodle soup and white bread and a doctors telling you food doesn't matter – just take this chemotherapy, nutrition doesn't matter. So for me it's like, forget all about your work, or your healing process, and I'll take care of your food, including the values of working with the farmers, and the nutrition of what you are eating – all of it. Every bite counts. (mC-04, chef).

Farmers and chefs reported many teaching interactions with each other and with their customers. As this young woman explained, “sometimes I don't feel like I'm selling meat, I feel like I'm educating” (fF-

03, farmer). Similarly, farmers felt their main role as educators was to bridge the gap in consumer knowledge, and that on-farm experiences had the best outcomes. “What we try to emphasize here, besides production, is education.” (fF-09, farmer). Field observations and conversations indicated that the simplicity of the tangible evidence of the seasonal availability of food that is locally produced is an educational experience because it highlights the difference of quality or of varieties that cannot be had by way of Mexico. Chefs and farmers reported that they think of themselves simultaneously as educators and as participants in building the movement for local food, and the possibility of more local production in the future.

A lot of people want that information about the farmers and they use it, at least they tell me that they do. I speak in a lot of places. I tell them where to get the chicken and they're writing it down. Or they sign up - they want contact information. They want me to email them the contact information for farms and ingredients we taste. I had 20 people who wanted information on how and where to buy that chicken. It's important for me to do that, and to say this is how you can do this, because otherwise people don't know how. (fC-02, chef)

Chefs educate “...by having local produce that is healthy and having, you know very clean ingredients boy, how you can beat that? I mean, everything is so packaged and shot out of a gun, so, that is what we do. Try to do clean, try to do simple and give people a healthful alternative.” (MC-01, chef and restaurant owner). Teaching about ingredients and experiential learning abounds at the market, as told by this chef:

I teach a Farmers' Market class where we go to the old town Farmers' Market and shop. We have an hour and we will buy whatever they want—if they want to try lamb and we can get lamb from Nora then we'll get it and we'll bring it back and cook it. There are varieties of things there that we can choose from -- We'll do eggplant, because a lot of people don't know what to do with eggplant and so they won't buy it—or beets. (FC-02, chef).

Professional social networks are somewhat siloed across all key informants, with the exception of those involved with or running a CSA. The sharing of knowledge, decision points, social networks and alliances differed within the sample population, depending on group values and the motivations for each project. Chefs reported that they rarely see each other socially, though they hear through the social network or their customers when other farm-to-table restaurants come on the scene. A number of the third wave farmers noted that while one restaurant may be doing a good job buying from farmers, new

farms cannot get in to see the chef or to develop the relationship because the chefs perceive that they have what they need.

Differing from farmers and chefs as teachers, advocates think of themselves as inherently playing an educational role while they are simultaneously being educated, either through the many volunteer and incipient projects underway through NGOs, their volunteer positions at farms, through community gardening projects, or their social networks. The knowledge process snowballed from know-what to know-how to being able to teach. Advocates educate about why people should eat local, and teach about the current restrictions or constraints within the food system, from field to table. They share their knowledge about the need for structural changes to the system, such as the need for local distributors, educational land-based training, classes and workshops that connect eaters with the local food and farmers, skills trainings, and more. In addition, local food enthusiasts share how to overcome or change to implement a vision for the future that includes a new food culture, as described here:

One of the inspiring reasons I'm involved is to develop a strong local food culture - and its not something we'll see in our lifetimes - but if we can start, its something to develop that hopefully will be in two or three generations down the road. I think culture of any sort of meaning or consequence has to evolve in a specific place, there has to be that attachment of the art and of the food and the body, and everything else to a particular landscape. We're too vast, the landscape is too varied here, and climates are too different. European countries that have developed culture are small. Italy is small, Spain is small relatively speaking to this continent, and they're still too big to have only one culture. There were 1,200 different languages spoken in the United States before we came, which would probably indicate 1,200 different cultures, and now we've got one, and there's, its not that different from Canadian culture, from English culture. The food system is the beginning of culture, and I want culture back (laughter). (mP-05, advocate).

Whether volunteering, gleaning, or working off reduced membership with a CSA, people are sharing cumulative knowledge. Participants reported taking learning into their own hands, gaining knowledge of which farms are selling direct through the network of CSAs and through the mapping of the local food outlets by farm. Here, a first wave farmer reports how she remembers learning about the food system while gardening and working at the Food Co-op, and how her knowledge accumulated during the third wave.

Well, part of it was growing the food and understanding the work and what we could grow and that we couldn't have things year round. And working at the Food Co-op, I learned about how food is sent all over the place. And, even now you order something and it's got to go to Texas first and some other state before it gets to you even though its grown nearby. We learned that working at the Food Co-op and seeing Grant [Family Farm] stuff come back on the trucks. So, we were

understanding that that's just how its set-up. It has been a gradual process learning about the food system. More recently, we've found more people growing things locally that we need. So, this year we are distributing local dairy to our CSA members from Windsor dairy. Now we can offer our CSA members our local butter, sour cream, and cottage cheese, and milk from another raw dairy share. (fF-09).

Socially-embedded knowledge is deeply rooted in practice (Brown and Duguid 1998, 35), and in this case, knowledge of the food system and the ability to take on a leadership role locally and “evince collective know-how” was a result of participation and the social networks gained as a result of the waves of the food system projects. The social production of engagement described by these many relational community events offers participants understanding of mediated values, and a fluid interaction with farmers and chefs and their own level of knowledge of cooking and place-based food production.

Animal, Vegetable... Local Food Norm

How do I know things are changing? It's everything from *The New York Times* covering CSAs to my mom and my grandma sending me articles about CSA farms and local food. (fF-03, farmer and café owner).

In the course of this study, regional national and non-local media and events were cited as having shaped knowledge, motivated critical perspectives, created new language and norms, and increased the number of community advocates and activists. Examination of the media revealed that national and local media coverage of food and farming issues and topics increased between the years 2005 and 2008. In 2006, after a series of engaging articles about food and agriculture in *The New York Times*, Michael Pollan published *The Omnivore's Dilemma*, an entertaining and digestible critique of agribusiness and the history of industrialization of the food system, helping set the tone for the national discussion that it is “not only good to eat, but good to think as well,” while detailing for readers what is different about alternative and small scale farming models. Giving a nod to the rising wave of interest, Oxford American Dictionary declared “locavore”, or someone who strives to eat only locally grown food, to be the 2007 word of the year. Stories about eating locally abounded in popular media for the first time since the “Victory Gardens” of World War II propaganda. The cover of the March 2007 Time magazine (Cloud 2007) asserted: “Forget Organic. Eat Local: the best food you can eat may be in your back yard.” Best selling authors like Barbara Kingsolver's 2007 book *Animal, Vegetable, Miracle: A Year of Food Life*, stories detailing her family's experience of growing and eating hand-raised and hand-made food reinforced the trend.

On the local scene, the first edition of the local version of the popular Edible magazine franchise, Edible Front Range, was published in the spring of 2008, showcasing farmers, foodies, recipes and local farm business advertisers for the first time all in one regional publication. Re-localization stories in Edible Front Range highlighted the successes of growers, business individual engagement in the local food economy and culture, sharing local food lore more widely, and more often.

Exposure to and uptake of the virtual crescendo of conversations about food and a local alternative food system led people to strive to emulate the actions and examples in the books, movies and interviews. Six interviewees mentioned that either they knew people who were influenced by reading the book, *Animal, Vegetable, Miracle*, or they were themselves inspired to eat more locally after reading it. Community supported farms reported customers asking for specific items they learned about in Kingsolver's or Pollan's books. Many of the "good" farming practices outlined in these books became part of the local lexicon, and the authors became highly valued by locavores. For example, Joel Salatin, radical farmer from West Virginia and advocate of humanely raised animals, was featured in *Omnivores Dilemma*, and later the movie "Food Inc." Salatin now writes books, goes on speaking and speaking tours, and pasture raised animals are the de rigueur for sourcing locally raised meats. With the rise and availability of these popular written works, people become local food heroes. The plethora of local food based topics in the popular culture helped set the tone for normative actions and behavior changes at the community level.

I would say that local food and buying from farmers does come up more and more with friends, especially being in this community where it has really just come to the forefront of everything right now, in part because of everyone getting engaged. It's exciting to be in Fort Collins during this time. (fF-01, farmer)

Another example illustrates how people are newly engaging with farmers and their food sources. As a result of the rising interest in local food, a formerly retail and export based farm turned into Colorado's largest CSA and organic farm. The patriarch of the family told me during an interview visit to his home that they felt pressure to take advantage of the direct market opportunities, especially after years of distribution challenges, fluctuating prices and a few bankruptcies.

Like I say we weren't smart enough to think of it that way until these ladies came down and asked for it. So, we started a CSA in April '07. Before the end of that month, we sold 126 shares. Going

in to '08, we said 'this went very well, maybe we can sell 400-500 shares.' So far, going into this [2009] season, we have over 1,000 members. (mF-07, farmer).

The change of over 1,000 of their acres to more diversified row crops and small animal production was sparked by neighbors, who approached him and said they wanted to buy their product through a CSA share in the farm, which they had learned about from reading *Animal, Vegetable, Miracle*.

In a 1998 radio interview, Kingsolver said she didn't expect the huge response to her book. She said thousands had responded to her personally, relating the experience of reading about how her family was able to eat locally moved them to try similar things. Reflecting on the national re-evaluation of food ethics, she said, "Regardless of who we are, we are animals and nothing could be more important to us than our food. We want to regain control over our food that we have gradually relinquished over the past few generations. When we begin to be come close to the people in our community that provide us food, we realize they are dependent on us too. Food is the great equalizer." ("Locavore Nation", the Splendid Table, PRI radio, 2008). Arguing that the local food trend is a movement, Starr (2010, 485) finds, "it is the local food movement's push into public discourse that has generated space for new knowledge." National media influenced choices, actions and projects, indicating a shift in context for local experiences. Thought leaders like Barbara Kingsolver, Wendell Berry and Michael Pollan brought place-based solutions and new language to the community dialogue, and shifted concepts of what was possible locally. Michael Pollan, reflecting in 2010 on the huge impact his writings and talks have had on the American public, said in an interview, "Once you introduce the issue to people and suggest to them that they have the ability to vote with their forks, either by positively going for certain kinds of foods or rejecting other kinds of foods, they realize that this is a responsibility and an opportunity to shape the world a little bit by their own choices." (Corrigan 2010, Indiana Public Media).

Witnessing the up-take of local practices that Pollan outlined on the local level made others hopeful for the possibility of more local-level change. Throughout the interviews, many people quoted or paraphrased Michael Pollan's simple quotes that would later become part of his 2010 primer, *Food Rules*: "Shop somewhere else. Get out of the supermarket and go to farmers markets, where the food is fresh, tastes better, is more nutritious, and you know it hasn't been processed. It forces you to be a non-industrial eater, and your children learn that carrots are not industrially lathed little bullets." These types of

extensively-read locavore rules served to enforce a common reaction to industrialized food in local foodsheds everywhere. Every locavore wants to be a “non-industrial eater” who steers children away from bulletized food. Participants were observed telling each other about how ways to shop in a supermarket (“shop the edges for the fresh stuff and stay out of the middle – that’s where all the junky food is”), and reported inspiration upon seeing national trends implemented at the local level. Even the new First Lady Obama played a role in how people understand and value what is happening locally in schools and gardens, and on food bank farms.

I think Michelle Obama just started a garden at the White house. That’s the first garden since the 1950’s or WWII or something like that, which is embarrassing that are own White House hasn’t had a garden. But there’s just a good feeling that people are willing to help out others regardless of their circumstances. You know, seeds are cheap, waters expensive but all these people locally have said, ‘we’ll work something out if you have people that want to garden on our land.’ So, that is awesome. (fp-08, advocate).

Further, another farmer relates that she gains inspiration to continue because the community has shown they value her as a person, and her business.

Being the producer and the seller, and wanting my product to stay local, it has really only been probably in the last four or five years in this community that others that I speak to all the time find such importance in it too. That emphasizes the value in my mind of what I am doing. (fF-01, farmer).

This data confirms that books, articles and other information about the food system can be “a consciousness raising resource that will cause readers to never see food in the same light again.” (Carolan 2012). New knowledge generated by national media created local interest in production practices, pasture and humanely raised animals, taste and quality. CSA members now ask farmers to recreate the experiences written about in books and magazines. Both instrumental and communicative learning can lead to transformational change, or the experience of confronting of a “disorienting dilemma” (Mezirow 1997; Kerton and Sinclair 2010). All types of learning were important elements of becoming involved in the local food scene in the study area. Most reported the co-emergence of learning through their own new understandings of cause and effect, and/or task oriented problem solving (instrumental) and insights into their own and other’s interests (communicative) related to the backlash of industrialization and globalization of the food system. All reported aspects of disorientation in regards to navigating new values related to food and agriculture.

Inspiration for Place-based Solutions

Participants were asked to contextualize how they came to know what they know about local food in relation to their present day actions. Participants report gaining a sense of place, by way of including farmer perspectives on land, seasons, inputs and cultivation practices into their way of thinking about place. All interviewees mentioned how they were inspired to change once they had instrumental and communicative learning experiences, indicating that their frame of reference and social network shifted. For example, one young man (who went on to co-found a new youth empowerment gardening non-profit), explained that the experience of going to the Land Institute in Kansas to hear founder Wes Jackson and author Wendell Berry speak about appropriate technology and agriculture gave him a historical and present-sense connection toward local action.

That really opened the door to something new and grounded in my life. I came from an agricultural heritage, and my mother had a huge garden with tons of food and flowers and there were always things growing around and I was taught by... culture I guess, that all that was something to leave behind, and I thought there was no future in food, so that caused me to rethink my connection to food and to landscapes and all of that. It was a turning point. (MP-05, advocate).

The sharing of information and new language extended into his social networks on farms and at events, where people – particularly the set under 35 years of age – passionately share quotes and theories of why the green revolution, globalization and industrialization created the food system problems of today.

Wendell Berry says that industrial agriculture takes a solution and divides it neatly into two problems, so you have CAFOs [Concentrated Animal Feeding Operations] where they don't know what to do with the lakes of manure and then you have the huge expense of putting ammonium nitrates on the soil. But now, I can mix chicken manure with dairy manure and spread it on the fields. We can take unsellable vegetable scraps and feed them to the hens – sort of look to close the loop a bit, which is cool. It's fun. (mF-08, advocate)

In contrast, older participants and held jobs within the food system tended work on problem solving at the instrumental level. In all, the production of knowledge is created through interactions and relationships. Idealism and solutionary actions inspire passion and commitment to the local food movement, in a positive feedback loop, as indicated by a range of participants:

With my friends, there is excitement around it because it's just like this idealism, you know like the dreaming component comes back in place. I mean, I get so excited that something could really be different here. That's probably why I'm so drawn to it, because of the notion that another world is possible. (fP-03, advocate).

A big part of making the personal connection is like people like Joe [local farmer]. He is passionate and that when you go to Farmers' Market there is a lot of passion. Everybody is passionate about their product as I am about what I do that's I think that is what attracts me to it so much, I really like that. (mC-01, chef).

Really, I think it has been up to a year ago, we were pioneering to get people to understand what food and farming is all about. Now, we're literally getting people to jump up and sign up for the CSA. In the past year it's really changed to 'you don't have to tell me anything about it.' We don't have to prove our worth as farm and as a way of life. It's a nice place to be after so many decades. (mF-09, farmer).

Additionally, transformative learning experiences are generative and performative (Mezirow 1997;

Kerton and Sinclair 2010; Stern et al 1999), as evidenced by complex reasons for engagement:

One of the things that I think is really a good trend is the biggest organic farm in our area, biggest food crop farm as opposed to commodity farm—they are doing more and more of their production sales locally. They're sending less produce to New England, Texas and California now than they were two years ago. That's a very positive development. (mP-04, advocate).

Certainly peak oil and global warming are still in effect, but you get so much better food, it's better for your health, it's more satisfying, you don't have to worry about it. It's nice... If we want to have food, we need to support our local farmers. These people are doing it for us, they're putting in 16-hour days to put food on our table (FP-06, advocate).

But here now its quite easy and much of the population has at least heard of the CSA shares. And you know cutting out that middle person, there's the potential for more demand. I guess my value is I want to grow food. How can I help my community to help me do that? That is a really strong value for a lot of growers (mF-04, farmer).

One young beginning farmer, recruited to Colorado to work at a CSA farm, reflects on the

inconsistencies of the current local food system, as a way of sense making:

As I get more involved in the food system, it's easy to see why it's set-up the way it is. Distribution is a huge pain in the ass. It is easy to see why grocery stores buy from producers who don't focus on anything but producing and they sell to a distributor that sells to a small market or they sell it direct to a large retailer. At the same time, it's not a very healthy system. I think that farmers are not getting enough money and at the same time, consumers are not getting enough good food. I think that soil is not being well enough thought of or cared for. Really, I think the best thing is the local food system because, really that's the only way you're able to honor the place and honor the area. Today, I saw an ad for King Supers this week- they had an ad for bratwurst and sweet corn. It's springtime! We haven't even planted sweet corn - it's just crazy. (MF-06, farmer)

Place-based solutions are a way to solve complex problems, and to feel good about local impact.

The new local food norm is evidenced in the settings for knowledge sharing, and the growing community of common interests by way of projects.

Finally, younger people in their twenties and early thirties emphasized grassroots identity and agency as the new norm. For example, a informant said she was seeking more ways to be engaged, and that she left the Local Food Group after the Be Local Northern Colorado broke off from being a project of the Rocky Mountain Sustainable Living Association and formed it's own non-profit, together with the

Northern Colorado Food Incubator. Three other participants also left the Local Food Group to work on other projects because they said they didn't feel included in the decision making process, and that their efforts and interests were ignored or not incorporated into the new organization's plans.

"I feel like there's not as much communication as there could be. And that happens a lot with businesses or organizations but mostly organizations where it seems like almost ego drive where the working together thing isn't as much there." (fP-03, advocate).

These participants reported that they felt ignored by the people who took charge of Be Local Northern Colorado, and were reacting to the change in power dynamic that resulted from the formation of the new organization.

I really think we could be making the most of the resources that we have organizationally. Maybe it's a bandwidth issue, a money issue; maybe it's a tunnel vision issue, I don't know. I don't think that's at all lack of good intention, because I think that's completely there or else I don't think all this local stuff would be happening. But I think there are still gaps between what we envision, and what is happening at the leadership level. I do also think that's because it takes a village - that's a little Hilarityism. But it takes all of us to do it, and not like there's going to be one organizational savior that makes it all happen. I think we all need to do our part. So on one hand I think, gosh, we could be doing so much more, but I think individually and cooperatively it all takes everybody. (fP-03, advocate).

Later, related issues of power and privilege came into play when on-the-ground tactical players found themselves excluded from public process particularly when it comes to economic development. For example, City of Fort Collins economic development staff and Downtown Development Agency officials attempted to exclude key advocates from a two-day visioning session about the development of a new building designed to house a local food market and distribution center. After Be Local staff members suggested inviting their key community partners, student status (namely this researcher) and the young age of some of the key advocates were in question, despite the fact that CSU professors and other professionals we worked with regularly were invited speakers. We made a case for an invitation to the event on the very topics we had been working on for years. Afterward, post event summaries and subsequent communications were only sent to the staff and professionals in attendance. However, younger third-wave advocates often found continued pathways for participation:

I've done everything I can to see to it that food thrives here, that the food system grows. I work at the Food Co-op, I connected my friend who wanted to be a farmer with land to lease north of town. I'm volunteering at a new non-profit and seeking land for them to train youth on. I'm working on the food aspects of the sustainable living fair, participating in the town hall meetings on food, and more all the time." (MP-05, advocate).

Local food projects facilitated normative place-based engagement.

Rooted Social Networks

Social movements, unlike pure interest groups, are organized around normative claims on individuals and social organization to act on the movement's principles other than self interest (Stern et al 1999, 83).

Social networks served as a source of empowerment amongst participants when the organizational structure was too ridged or were perceived to be not inclusive of the participants' interests. Not surprisingly, people who already worked with one or more institutions were most likely to mention that three training and infrastructure resources were important knowledge centers. These include 1) The demonstration kitchen and children's garden in the City-owned Gardens at Spring Creek where people of all ages take classes or have events; 2) the CSA research facility at Colorado State University, where crop trials are comparing nutritional values between organic and conventional production; 3) the Environmental Learning Center where youth are taught gardening skills, or various university or city led projects that link people with gardening education. Five participants, all of which who work with the City, Larimer County or Colorado State University Extension reported that those institutions played a role in their knowledge about local food or agriculture. The strongest social networks reported were between those who had given public talks on local food or agriculture (as in the case of Dennis Stinson of Happy Heart CSA), or engaged with these institutions within the last five years.

Younger farmers and beginning farmers reported a sense of a strong social network around food, recalling the first wave of organic farmers paving the way for today's local food movement, and mirroring similar informal relationships emerging across the local food movement and amongst eaters (Starr 2010). "Whether it's building a chicken tractor or preparing garden beds, lot's of people come and help us—they our friends, too—so we do a lot of socializing around that. The summer specifically is a lot of just sitting outside here on the farm." (mF-04, farmer). "Sitting outside" refers to the social time spent after the day's work, eating the bread that was rising all day and then baked in the wood fired outdoor oven, with cheese from another CSA farm, and perhaps with some beer from the local brewery where many of their friends work.

People said participation events or showing up at farms or at the site of exchange of food or ideas, is an indicator that there is hope for change:

In the three CSAs that I've been involved with now, I never saw a lot of people that were say over 50 that were in the CSAs. There were some, but a very small percentage. But now, there's more young hipsters coming and older people buying shares. There are mostly a lot of young families. I didn't see that before, but now I do. (MF-05, farmer).

At the farm, it's a community thing too, it's random people coming together to volunteer because for one reason or another, they have an interest in how to grow or they want to take their growing experience to the next level. The next thing you know we're flying off the rope swing, and having huge lunches and drinking wine and the day's done and these people have made these connections and their relationships carry on. It goes beyond just the retail for me personally there's a big community component to it too." (fF-03, farmer and cafe owner).

Direct contact with farmers opened up new learning opportunities while creating community for consumers and producers, seeking convivial spaces, "where people come together to share the everyday joys food has to offer" (slowfood.org). For example, these farmers describe and a sense of pride and fulfillment:

I feel very much a part of the community of the local growers and I feel very much that I can call on them for help. Then the relationships with the consumer – they are one motivating force for growing food. I mean you're laboring and then you go to a market and people are very excited about the food. You can feel proud about the work. So that relationship is really important for me – not seeing people, then the work would turn into toil rather than a labor of love. (mF-04, farmer).

Now I feel like I'm working towards a cause beyond myself. I feel like I'm contributing to this farm that's been around for 30 years organically and making good food for people. I enjoy that sense of satisfaction and fulfillment from doing what I do. The people that I work with are really good to work with, really fun to work with. I'm learning a lot, which obviously is fun any time you can learn something. I get to be outside a lot of the time. It's so beautiful here. So, there's a lot of good things about it. I'm sure you're familiar with the appeal of agriculture. It kinda gets to you. (mF-08, farmer)

Additionally performative and cultural expressions of identity are wrapped up in new ways of interacting and sharing food knowledge. Local food enthusiasts reported increasingly being inspired to try solutions via other organizations and conferences, media, books, stories of other community successes. Their experiences and roles as go-between organizers generate new knowledge about farming, and a related sense of community. In the city, people are known by their food production roles, as this farmer explains:

[...]We were walking down the street, these people walked out of a restaurant the other night and she was like, hey "it's our farmers", so then at the street level, there's a stamp of your identity. And that goes for other producers in town that we know from the market; I identify them as the

mustard lady or the bread lady. So, I guess for me it has always seemed so personal. Like I don't think of the big food system necessarily, I just think of it as my personal community (fF-03).

As social norms shift to taking action at a community level, feelings of obligation drive social organization. Here, one participant describes how an event with a CSA farmer as the speaker engaged her interest, led her to become a CSA member, and then she became part of the community on the farm:

I was at a meeting called together by the Be Local Northern Colorado group, and Gailmarie had Dennis Stinson presenting. In normal Dennis form, he was wearing his biking spandex and I remember thinking "who is this guy walking around in spandex?" But it was hilarious; he had this *Time* Magazine that said "Local is the New Organic," and he was just parading it around in these small shorts and brightly colored biking jersey. You know how he is a preachy sort of guy. And that's how I learned about Happy Heart Farm, the first CSA in Larimer County. After the impression he made on me, I definitely was like "What's Happy Heart?" and then I got a [CSA] share with them. Now I actually cooked and teach the members recipes this year as part of my working share. I cook for the farm at the farm. (fP-03, advocate).

A pattern of relating around local food perpetuated the knowledge generation process, often catalyzed by organizations or new groups affiliated with a food topic. The setting for communicative interpretation of new and continuing learning took place where groups could gather, such as Farmers' Markets, town hall meetings, workshops and local harvest happy hour events offered topical focus for those interested in learning more. Small groups also formed book clubs and discussion groups as well as hosted all-local meals or dinners. Similar to underground restaurants, these dinners allow participants to educate each other about a variety of alternative values (Starr 2010), including conviviality (shared poem or statement before dinner), food quality (guests bring food, but must also tell where it is from, or tell the story of the food), showcase artisanal products (hand made alcohols, pickles, breads, etc), and express local food interests (I got this at the Farmers' Market or my CSA, etc). At the dinners, for example, participants talked about choosing farmers to get their food from, share which restaurants support farmers, talk about farmers on a first name basis, and share recipes and aspirations for potential within the food system. Here is a story shared at one of the local food events, as told by my neighbor as we sat in an orchard at a long table awaiting our out-standing-in-the-field dinner:

My Uncle is a farmer. He's a rancher actually, so we eat a lot of their beef, which is nice. So I talk about it less with my family and more with my friends, and almost more from a visionary perspective of wouldn't it be great if we could start...if 40 percent of our food as a community was grown in people's backyards or if medians were plowed up and we used that for local food production. Or, if I had a rooftop garden, you know, like talking about more the visionary, what it could be... that sort of thing. Getting away from the grayness of what seems status quo and how

food could be in the future. That's inspirational. That's what we talk about mostly. (fP-03, advocate).

In summary, people learn from each other as they develop a common language centered around place and the practice of shared topics that relate to food, such as climate, farmers, animals, processing, manufacturing, jobs, history, recipes, seasons, soils, animals, chemicals, scale, freshness, flavor, and how to grow and cook local foods. This knowledge also creates a reference point for new social networks, daily practices, habits and decisions. Organizing place-based solutions and projects are empowering, indicating how modes of governance and rule of behavior evolve through everyday forms of civic engagement in practice.

Place and Sense Making

Whenever you can see the impacts of it or if you, without much physical effort, can in some way experience the impact of your decisions then they are local decisions (MP-05, advocate).

As an example of the performative nature of honoring the uniqueness of place, the process of sense making about the food system reveals an understanding of the overall values that differ across the food system. Local food market outlets such as Farmers' Markets, the new winter markets, and other places of exchange increased the common discourse amongst the local food network, and created a community way of thinking about the local.

I think local is definitely within the County. Then as it stretches out to other foods that maybe aren't produced in your area, and then it goes to the state level. I don't call regional food like, Rocky Mountain West local. If you are getting chilies from New Mexico, I could call that regional, but you are keeping a trade route open that is really historical (mF-04, farmer).

Natural history knowledge, in terms of the regional climate and limitations for growing certain types of foods, gives context for local knowledge. "If I say I bought this locally it encompasses pretty much all of Colorado. Local almost to me is more about whether the person's farm, business, and heart is anchored in Colorado." (fP-01, advocate). Understanding complex topics, together with personal experiences, led to a new way of knowing or understanding their own relationship to local food, in context with the present experiences of place. "It's within your reach of where you spend your time- the people you commune with, the people you see at the store, in schools. That's what I consider to be local, and to

be community.” (mF-05, farmer). This shared sense of history and of place, climate and land limitations, indicated sharing of knowledge and details of the food system.

People also indicated that relationships trump distance when considering what is local. For example, across all participants there is an agreement that certain foods are considered local if they are grown in Colorado. Of note, though, the relationship with one farmer, Steve Ela, who has been selling peaches from the West Slope of the Rockies at the Fort Collins farmers market. He and his peaches are commonly referenced as within the boundary of what is considered to be local. Mr. Ela’s long-term presence and the only organic peach source in the community via the farmers market relationships contributed to place making and sense making amongst the locavores, as described below:

Steve Ela is local to me because he’s Colorado but plus where he’s from he clearly makes a food print on that community and is part of its community fabric. So, I almost do it on a case-by-case basis of where it seems like their linkages are to our community. (fP-01, advocate).

Steve Ela is a great guy and he is a fourth generation organic fruit farmer and he, I really like him, and I like what he does. I want to support that, so our fruit at the Food Co-op, like the apples and pears we get from Ela Family farms at the Food Coop we would call local, even though it is pretty far out of our range. When we know the farmer, we know the impact of our Food Co-op purchasing choices and we know that he is doing a good job. When we buy through one of our distributors, when we buy things from like say, Rocky Ford melons, or other things that we buy from within the state, we don’t label them as local because they come through a distributor, which is yet another one of the bazillion filters of the industrial food system. (mP-05, advocate).

Q: Do you think the western slope would be part of what we consider local? A: We grow some peaches here. There are some backyards, some Siberian varieties, they could probably be commercialized here, but we value the Palisade peach, like those from Steve Ela. (mF-05, farmer).

I think for us it’s really important to honor the uniqueness of the place. So, in Colorado you’re not gonna get good peaches from the Front Range, you’re gonna get them from the western slope. So, that’s a local Colorado fruit and I think people should buy it. Some of my vegetarian friends in town were arguing that it’s more efficient in terms of water usage and resources to be a vegetarian but if you go up to Wyoming you’re not gonna grow much without irrigation in Wyoming but you can raise good beef. In this place, it’s a good idea to support grass-fed beef and grass-fed lamb from Colorado and Wyoming. So I think the mileage thing isn’t as helpful as looking at the geography and climate. I guess bioregion is what you’d call it. That is what I think makes the most sense and the cool thing about it is that it is unique everywhere. It’s not some cookie cutter thing. (MF-06, farmer).

When you think about the fruit and how we just don’t have any fruit growing over here, I think there is always a need to consider making some adjustments to that term when it comes to the food that is just not grown in the area. (fF-01, farmer).

Steve Ela, the organic peach grower who sells at the Farmers’ Market and now delivers to regional CSAs, as part of the “fruit share” offered to members, thereby further integrating the West slope peach into the local direct market and the geography of local food.

Chefs are more likely to espouse the local values of the farmers growing practices, and connect their customers to the practice of seeking out local seasonally available ingredients, as a result of working directly with farmers, as conveyed by this caterer/chef:

I have a handout that I give to all of my cooking class participants that has a list of all the local farmers, to contact them directly. I give them contact information and tell them how to reach someone who produces lamb, beef, or chickens, and to go to the Farmers' Market. I also write a column in the local paper, *The Coloradoan*, which comes out every Wednesday. So, I talk about local food all the time. A lot of people are interested in local food. (fC-02, chef).

In conversation, chefs revealed a connection to knowledge about the land, weather and a growing knowledge of farming production issues, as a result of closer relationships with farmers and sharing stories from the farm with their customers. For example, this farmer said that working with chefs has added value to her farm, and she goes out of her way to maintain that relationship:

I think that the restaurant-producer relationship is something that you have to want to work at. It is really easy as a chef to just pick up the phone and call Cisco or Yancy's. They know that if they are out of something today, that they could have it tomorrow if they call those people. It is harder for them to pick up the phone and call a grower, unless they have a personal and professional relationship with a grower, which, some of those people have with me. They know that they can do that. My chef calls typically come in at 1:00 am. I turn off my phone and it goes right to voicemail in the middle of the night, because that is when their shift is over, and that's when they realize we are out of greens for tomorrow and they need this or that. (fF-01, farmer).

Knowledge about the experience of farming, the land and the climate deepened for chefs, too. Participants develop an intimate knowing of the issues, problems and life histories of farmers, and use that knowledge to gain social capital as experts in the food system. For example, a caterer related an issue one of the farmers was having regarding soil fertility, sharing that crop rotations and different soil types are effecting the availability of certain types of vegetables or fruits in the region, or the details and the difficulty a farmer she knows went through trying to certify a specific piece of ground as organic. (Notably: this chef was also using the story of the farmer's difficulties to defend her knowledge of the quality of the product, and to put value on the food despite its lack of organic certification.) Weather and personal experience also comes into play with the story telling about the farm and the food. Colorado's erratic summer weather in 2009, for example, brought unusual bouts of summer hail, tornadoes and sudden early frosts, all making an impression on the larger community of people tied to the success of CSA farms, and conversations about the extent of crop damage figured prominently in conversations at

Farmers' Markets that month. Here, a chef's email to her private clients and copied to the Facebook page of the farm demonstrates her role in communicating the farmers experience, educating about the seasonality of certain foods, sharing practical knowledge and tools that puts the farm in context with the seasonal actions of the cook:

Hello all! [The farmer] just called me from the farm, harvesting peppers like mad in case of a freeze tomorrow. She's there by herself trying to get the last of the crop in, so send your warm thoughts to Wellington so the harvest can go on! She asked me to send you some info on roasted peppers, which will be in the share this coming week. I'm forwarding my column to you from this past week's *Coloradoan* about roasted peppers to give you some inspiration, I hope. The main thing is not to freeze them in the bag you get with your share. Separate them into a quantity that makes sense for your family size and freeze them in separate bags so they are actually usable. You'll never use them in a big block, and you don't want to thaw a huge bag in order to use just two or three chilies. Stay dry, and hopefully, warm! (fC-02, chef).

This knowing the farmer's products, experiences and practical constraints of the locale and the weather brings about a trust of the farming process, a consumer acceptance of the nuances of decisions that lead to certain farming techniques and is reinforcing a community of practice. Through the exchange of food, a community grows across the distance of urban and rural landscapes. In these ways, food can be the entry point for sustainable actions in general, as found by Kerton and Sinclair (2010).

Participants also engage in direct action and problem solving throughout the system, and find ways to be in practice with of local food via volunteering on farms, buying into CSAs, hosting dinners featuring farmer's food on menus of their own, talking about the practices of local food, sharing food as demonstration of their new sense of community and support. Participants talk about understanding their economic impact, (e.g.: "put your money where your home is,") and promote all local meals and seasonal food choices, in addition to promoting the locally owned businesses that support farmers. These actions define their own sense of what is local broadly and systemically, including the solutions-based practices of eating locally.

I'm interested in self-sufficiency and food is definitely a huge part of that, and so I thought we need to be and part of it. Being a part of Happy Heart CSA, and Grow Food Not Lawns, and part of the Matter Book Club is kind of an antidote to the world of fatalistic thinking, like crap what if everything falls apart? We need to have more food grown locally so that we are self sustaining. At least as self sustaining as possible. (FP-03, advocate).

Repeatedly, people expressed that the false logic of shipping food around the globe and was creating unhealthy systems, indicating systemic knowledge. "The more processed the food is, the greater

the chance of taking away the nutrients. Although the food chain is safe, it is shipped internationally when a lot of that stuff can be done locally. It's unnecessary" (mF-06, rancher). Similarly, another farmer said the value of local food to him is proving, "...that we don't need to buy into that very insecure and fragile centralized food system. You can see it [the current system] fail and how they prop it up constantly." (mF-05, farmer). Participants additionally revealed insight into their own interest in the context of consumer patterns, social networks, and their own behavior in relation to food. While food miles, nutrition or increasing access to local markets may have sparked a participant's entry into the conversation at the local level, each of these topics had a snowball effect, increasing the interest in learning more, as this farmer relates:

When I got into farming, back in the 1980s, it didn't come to me right away that there is this local food system. I got into farming because I enjoyed that type of work. I learned more about it as I worked on an organic vegetable farm here in town. Through that work, I came to appreciate the value of the local food system, to learn more about it and to focus on working with the community first. (fF-01, farmer).

Food, made up of ingredients coming from different farms with varied stories and locales, is an embodiment, or a container of experiences that influences the construction of thought and the weave of every person's daily experience. For these participants, local food gave shape to their sense of place and identity.

Knowledge Dense Sites

Across all three of the waves of this civic agriculture movement, food based events are found to be tools to bring people together for intentional education and engagement. Beliefs about the consequences embedded in the food system were found to be generated in educational settings like planning meetings, conferences and trade meetings, and in settings where food was being prepared or shared. Those values were reinforced via the rising demand for local food.

Now they're calling us! It's not like we have to go sell ourselves to them. Now they call and say, 'hey we want local farms set up.' The change came about recently, where 'we don't give a shit' went to 'hey, local farms are cool.' (MF-06, farmer).

The setting for educating the general public or consumers about the state of the local food system is most commonly reported as: a) while shopping or volunteering at Farmers' Markets, events, b) assisting chefs in cooking classes, or c) out on the farm. All three of the educational sites are instrumental

and key learning sites. Events, such as the first annual “Food, Gardening, Growing Town Hall Meeting”, local Farmers’ Markets, and through underground dinners or family meals are the main settings where people were observed and reported sharing knowledge about local food with each other. The Town Hall meeting was part of a series of community-driven initiatives organized Todd Simmons, the director of the literary and community non-profit, Wolverine Farm Publishing, parent organization of Matter Bookstore. The February 2008 topic was organized by Todd and myself, intending to bring together the known small groups and citizens working on similar food, gardening and growing issues so everyone could know about the various groups. Held in Matter Bookstore in downtown Fort Collins, Simmons kicked off the evening with a reading of the Wendell Berry poem, “Mad Farmer Manifesto” to the standing-room only crowd. We identified eight invited organizations to the projects they were working on. After the eight, we asked if there were more in the room that wanted to present, and ten more raised their hands. The line for the microphone stretched past the people sitting cross-legged by the coffee counter, and nearly reached the front door. After the presentations, the buzz in the room continued as people found each other and sparked further conversation. Out of this one meeting, small-scale farmers found each other to buy seeds and compost together, and two new organizations found board members. The annual event continues to this day.

A woman, in her early thirties who lived in downtown Fort Collins, has a full-time job, and volunteers on three non-profit boards, notes she was engaged in working on a local Food Not Lawns project by way of another Town Hall Meeting a few months earlier:

Forever I’ve been thinking: “Man, we just need to have meeting where we sit down and we talk about what the issues are and solve problems around it,” because that’s like Ben Franklin, most of his inventions came from community conversations and problem solving. He’s a huge inspiration to me. So, when I saw a sign that said “Town Hall Meeting,” and the topic was about community, which I thought was great, but I didn’t really even care what the topic was. I was on a date that night, and I was like ‘Ok, I gotta go. I’ve got a Town Hall Meeting.’ Then we just started talking about what was going on in the community. We talked about everything from affordable housing to communication with the *Chronicle* stopping publication, how there are gaps in communication now with parts of the community. And then Todd posed a question: “What do you think is the most important issue facing us right now?” Kent was the first person to answer and he said “food”. I would probably say something like affordable housing, but I don’t know that one trumps another. We just stuck with that and said ‘Well, let’s do some problem solving.’ The next morning I felt so excited, like ‘oh my gosh, this is what community activism is all about.’ We’re actually doing something, we’re not just talking about it or one person doing it. We are all coming together to problem solve and figure it out. (fP-03, advocate).

The above quote illustrates how one event had a snowball effect creating an educational path, and deepening engagement in the local food movement. It is also an example of the new relationships, and a sense of identity for the growing number of advocates and local food volunteers seeking change in the system were significant outcomes of these types of gatherings. Even traditional agricultural educators, who expressed reluctance to get involved at the outset of this research, were found to have been influenced by the rising “Do It Yourself” (DIY) and gardening craze. For instance, a CSU Extension staff member relates how the social norm of gardening changed her at home practices, and influenced her professionally.

“But as far as growing your own food, it is so much better for you. [My husband] doesn’t like tomatoes, and neither do I, so we gave our homegrown plants away. We were growing them just to prove that we could. We grew a lot of herbs and also canned the produce. Now at least I can relate to people better and answer home gardening questions.” (Fp-08, advocate).

In addition, key actors in this research often focused on problem solving at events, such as at Getting Connected (a networking and workshops event) or a gathering at the Chamber of Commerce on launching the Northern Colorado Food Incubator. In addition, the annual Rocky Mountain Sustainability Fair, run by a cadre of over 50 dedicated RMSLA volunteers, and attracting more than 12,000 attendees from 13 states, expanded workshops and multi-day trainings, cook-offs, and celebrations related to food as a result of Be Local’s focus on “Be Local, Grow Local”. We locavore enthusiasts (farmers, chefs, advocates) provided the expertise and volunteer hours to run the annual weekend long slate of events. Many participants also reported that one event changed their day-to-day collaborations, introduced them to new networks, and increased amongst the various projects and participants.

Understanding Systemic Complexity

The power of transformative learning lies in its ability to empower the individual to think as an autonomous agent— to learn to “negotiate his or her own values, meanings, and purposes, rather than to uncritically act on those of others” (Mezirow 1997, 11).

All participants in this study reported learning about the value of local food in relation to the system as a whole. People looked to local and regional food systems as solutions to a broad ranging topics, such as the secondary impacts of globalization, industrialization and climate change related to the environment, culture, land, health, culture, economy and meaningful livelihood. Participants, particularly

those who are currently farming or involved in growing food, revealed that they understood and were impacted by the consolidation and globalization of the food system as it was occurring in historically agricultural areas. Encountering information about how to have a hands-on positive impact via the local food movement, people find they have personal context for engaging in and assessing viable solutions. Having gained discursive instrumental and communicative knowledge about the food system, food becomes more than an entry-point into the movement, as this young man conveys:

Once I got kind of the underpinnings to understanding why to do all of this, why I felt like this was the correct choice, or the correct way to live, then it became a matter of putting my hands where my mouth part was, starting to actually work and learn. It's kind of, been a transitional and transformational learning process. (mP-05, advocate).

Participants also reported understanding “glocalization” (Ritzer 2004), because the leader of Be Local Northern Colorado aimed to connect the locally valued Fair Trade movement, the Center for Alternative Trade Studies promotion of locally sourced Fair Trade and organic labels, and the concept of local-global conscious relationship economy. People seek to understand the environmental and social impacts of the food system, citing links to and between various complex issues in the food system, such as peak oil, hunger, energy savings, green house gasses, climate change, nutrition, food sovereignty, culture, community and rural livelihoods. For example, in the case of this local food advocate, learning about food miles and reading about the locavore diet challenge became an action and empowerment point:

I've been very concerned about peak oil and global warming, and knowing that the average piece of food on our plate has such an impact – something they even did a test on ... So instead of just agonizing over it, I decided to do something because doing something is better than agonizing. So I said [to my husband], let's do the 100-mile diet. (fP-06, advocate).

This participant, who previously thought of food as a side-interest, said her participation started after reading a book about peak oil. After the discovery of the depth of freshly harvested flavors of food raised in her yard, she and her husband were increasingly committed to sourcing local food. “We found, even from the beginning, that the food is so good. It's so flavorful! Best beans I've ever tasted. It's got all the flavor, and it's not been treated with god knows what.” (Fp-06, advocate). After establishing a complete list of sources for local and regional food, the family's experiment grew into a regional food-sourcing buying club, called Loveland Local:

In April 2008, I started publicizing the food buying cooperative with Crescent CSA members. We had an initial little meeting and people seemed to be interested in it. From there on, it's grown by word of mouth. (fP-06, advocate)

One and half years later, Loveland Local sources, orders and distributes bulk local and regional foods of all kinds two times a month, year-round, for over 100 buying club members. Food co-ops and buying clubs formalize local trade relationships, aiding in the reduction of local sourcing complexity faced by individual consumers seeking local or regionally produced food. Farmers noted that the buying club is a good outlet their product, and is supporting other food businesses:

There is a new other distribution co-op out of Loveland called Loveland Local, and we sell our beef and some of our vegetables through them. Also, Grower's Organic [distribution company] makes one drop for both Loveland Local and for us and for Sunrise Farm [intentional community]. The woman who organizes it doesn't have a website or anything, it's kind of like word of mouth at this point. (fF-02, farmer).

Answers to the question what are the components of the local food system show a depth of awareness amongst these participants that includes new understandings of the nuances of the food system and the potential environmental, social and economic outcomes of changing the system.

Q: How would you describe the components of the local food system? A: At first, I started at the producer. I wasn't so good about thinking one step back, including inputs, suppliers, labor, and stuff. I usually start with producers in my head, then distributors, restaurants, and retailers. Now, because of my recent work here, I think of things like the food bank and the people who provide food at schools, health institutions, long term care facilities, and then consumers. *Q: Why do you think your mind goes automatically to the producer? How did that evolve?* Response: I come from a farm and I guess in Iowa the farms are anchored enough in farmer co-ops that the co-ops kind of felt like the farmers and I guess that was the major input supplier and we weren't labor intensive, we had machinery so I didn't think so much about labor. Our family was friends with the machinery dealer, though those were not owned by farmers. But even the cooperatives where you got most of your seed, fertilizer chemicals was owned by the farmers, so I always thought of the things that the co-op did as just being farmers role. (fP-01, advocate).

We've used up too much of the world's oil in the last 50 years for our grandchildren to be able to live the same lifestyle we were living. It's just not possible to continue this way. So, what are we going to do? How are we gonna change in a way that allows people to think that you can make changes that will actually enhance everybody's quality of life. It's not a question of learning how to do without, it's a question of learning how to do differently. (MP-04, advocate)

I don't feel like there's hard decisions when you eat locally. The decisions are made by the philosophy. I believe that living within my means and within the carrying capacity of this area is important, and is a more enjoyable way to live. It feels right, so decisions are made by the underlying philosophy. Personally, there's not a lot of thought that goes into 'oh, I want a banana, but they're not grown here.' I just don't want a banana. (mF-04, farmer).

Further, local action that aims to deepen community is seen as an oppositional response to globalization and the multi-faceted social and environmental problems embedded in the food system, as described by this third wave participant:

I've been helping with Crescent Farm's CSA administration for quite a while. I speak anytime anybody asks me to speak 'cause it's something I really believe in. Eating local a way that each one of us can make a difference. You know it makes more difference than changing out your light bulbs. If you start eating local foods, you're changing a lot of things. You're not only affecting the global warming and the peak oil situation, you're also building up a local community. You're reestablishing contact with your ecosystem, your environment bioregion, and with the seasons of the year. (fP-06, advocate)

Reflecting on relationships to place, the study subjects reported consumption patterns changed, and led to valuing a self sufficient local food system:

I think this is bigger cultural moment we are all reacting to, like some very big things like climate change, peak oil, and obesity and the health system. There is a convergence of a lot of big things and each of those partners and groups is a part of it, including the food bank reacting to the economy and the rise in hunger (fP-02, advocate)

Well, I think goals for sure of a local food system would be a very small carbon foot print, trying to keep costs down, both by what we need on our end to produce the vegetables and the fruit, and on the sale end of the distribution to try to keep everything as locally bought and sold as possible. Certainly one of the values and the goals of the local food system in my mind is keeping the local economy flourishing. Having food security so that people in this area know where their food is coming from, they don't have to question where it was grown, when it was harvested, that kind of thing. (fF-01, farmer.)

Participants showed integrative frames of reference and awareness of complexity across the food system. Describing the system also invoked statements that included visions for the future:

I just want culture. I want a culture that grows from here. I think that a strong local food system is the foundation of the strong local economy and a strong local economy is the foundation of the strong local culture. I want to know what this place has to offer on a multi-generational time scale. I want to know that it will happen. I don't know why I feel that way but I want culture and I think food is fundamental to that and about everything else so that that's why I want a strong local food system. Because I want my great-great grandkids to have an awesome local culture." (mP-05, advocate).

Every one of the participants reported that the perceived solutions involved learning anew, and gaining new skills as well as new social status and roles in the community.

I just spoke on this topic at a conference on Tuesday, teaching high school girls that our food system has become so industrialized, it's not for the benefit of the food or the consumer, and it's not even a benefit of the farmer, it's for the benefit of the middlemen and companies that are producing prepared and processed foods. What has happened is that the quality has suffered and it is so far out of hand, it doesn't even make any sense anymore. (FC-02, chef)

There's a big influx now for people wanting to do gardening. It's fun. I feel like I'm giving back. I've found a niche and it's very enjoyable (FP-09, advocate).

When asked about the evidence of success and change people have experienced, people mention they measure it by participation. Additional energetic and passionate people are showing up group gatherings and events such as the new winter market, community dinners, and new events.

Farmers felt encouraged by the interest and involvement in the related aspects of the food system, too:

And the county and city as well in starting to open up this dialogue of using public lands for growing food. That dialogue about how food is part of the local economy is new as far as I know. It hadn't been there and now it is. Though it's not happening or changing here in the rural places, with the exception of a few grazing permits on city open space as opposed to the typical national forest. But there's just more dialogue, more awareness now. And the restaurants are expanding too. There was no one serving any food that was coming from a local place and more people are at least saying on their menu, and more are seeking to do it now. It's encouraging (MF-04, farmer).

Overall, there is a sense of the new being exciting, directly related to how people are active participants in the food system. A collective understanding of strategies needed to build local food systems was reported by all of the participants. The convergence of interest from different sectors including local institutions led people to believe that they were part of something greater than their own efforts, and to gain appreciation for system-wide issues.

Findings Conclusion

The findings indicate that particular catalysts led to community level engagement corresponding to transformative learning pathways, and reinforcing sociology of knowledge theories, and that, as Carolan (2012, 157) asserts, "knowledge is something we do or practice". While these findings confirm much of the literature reviewed in Chapter 2, we also see how meaningful change involves discourse and working with food system stakeholders in setting collective problem solving and action. These findings reinforce that the result of the interface and interaction between instrumental and communicative learning is often transformative – or, as Kerton and Sinclair (403, 2010) assert, this process "represents the learning experience that sets the learner on the path to transformation of normative ideologies". Food is indeed the "symbolic frame of reference" described in Mezirow's (1994) theory of adult transformational

learning. Through the disposition in the learner, learned agency and socialization, each piece of new information about the food system becomes transformationally meaningful. Combined with increasing systemic and global knowledge of the food system, the three waves of new local hands-on projects created informal learning situations, and new social network settings that lead to civic engagement. Transformative learning projects and the key participants are the grassroots force behind many of the structural changes that influence the rise of the local food movement and democratic engagement in local food. Finally, this data reveals how the network emergence process weaves of the fabric of the local food movement, builds communities of practice, and indicates the emancipatory potential of civic agriculture. The data reveal evidence of the formation of a community of practice surrounding local food engagement, problem solving and epistemology, informing how the local food movement emerged in Larimer County, Colorado. The next and final chapter delves into the discussion of this case, the implications for future research, and the conclusion.

Chapter 5: Conclusion

The movement to build a stronger local food system in Larimer County is led by people who had transformative learning experiences, nurtured new practices and created new social norms. This study identifies the decision points, key actors and alliances of the local food movement, illuminating the importance of movement waves and examining the epistemology of the local food movement. It also highlights collective every day resistance that is part of the practice and creation of local and civic food culture (Delind 2011), documenting the “meaning and memoir” (Wilkins 2011) that is a transformational element of local food. The primary purposes of this research are 1) to outline and describe instrumental, communicative and transformative learning in context with the local food movement; 2) to explain the context of civic action and empowerment as people assume new public responsibility in the food system; 3) offer insight into the how and why of the epistemology of local food and civic agriculture. The rise of the local food movement documented herein offers insight into the critical conditions for transformative learning. In this chapter, I discuss the four key findings and offer research suggestions that can inform and support the future of the local food movement.

Key Findings

Several key findings emerge from the data that contribute to the epistemology of social change vis a vis local food. First, this study reveals a framework for understanding the waves of the local food movement, as new social networks and projects create the context for local food engagement and epistemology. Second, transformative learning situations create a common knowledge context and shift participant identities from consumer to food systems stakeholder and teacher. Third, engagement in food system complexity and the epistemic participatory response to systemic constraints demonstrate the capacity of the advocates to set collective action and engage civically. The sociology of knowledge and process of becoming a participant provides a more complete explanation of why and how food activism becomes a salient personal motivator that results in food democracy and civic agriculture. Fourth, this research adds to the discussion of the local trap, indicating lessons for the local food advocate and the

researcher. Overall, this research furthers our understanding of how adult transformational experiences and knowledge is gained through local food engagement.

Significance of the Movement Waves

The sociology of knowledge and process of becoming a participant provides a more complete explanation of why and how food becomes a salient personal motivator. At the outset of the research, one of the goals was to find out the role of the organizations in creating the rise of the local food movement. The projects described herein outline how the key actors got involved, via discrete projects. The motivating factors for these participants were the locally engaging role of instrumental and communicative projects, which were the settings for transformational learning that launched new social networks, generating new organizations. The organizations and businesses that grew out of the groups and settings described in this research have now taken root and are having an even further impact on the local food movement. The documentation of the waves is significant because the first through third waves of the movement represent the foundation for the societal focus on local and regional food systems. This research found that the waves of the engagement at the local level describe the incipient development of the local food movement. It is likely that the milestone beginning of the fourth wave of engagement is when projects and organizations would become part of the structure of the local food system (as they have in other places), though this research ended beforehand. One indicator to consider for the future identification of when regional food systems advance into fourth and fifth waves of engagement could be when interdisciplinary and stakeholder associations form and aim to address common food system goals, like food policy councils and other system-wide collaboration projects like food assessments. The beginnings of such a milestone was evidenced in 2008 in Fort Collins with the group that eventually wrote the Northern Colorado Regional Food Assessment.

In this case, the second wave was a tipping point for the formation of new relationships, and a willingness to engage, beginning with the Colorado Crops to Cuisine project participants. The relationships I documented that grew out of the second wave were part of an evolutionary process. In the third wave, the local food movement arises in the form of the organization of “Be Local,” which creates the container for the convergence of eaters being exposed to new ways to prepare fresh food ingredients, a

greater number of farmers markets and farmer direct or instrumental experiences, the rise of CSA and gardening interest, along with the rise of the “new economy” and organizations of local business owners. All of this activity was supported by existing sustainability groups, and with extensive local social networks. Those who started into the movement by the third wave represent a collective tipping point of awareness about the social, cultural, and structural disconnection from food, and a personal sense that they should “do something – it’s better than nothing” (fP-06, advocate).

The social networks of the local food movement in Larimer County are well connected because of the projects initiated in the first and second waves. Many participants acknowledged that part of the process of starting new projects also demanded they build new relationships. Some participants gravitated to working one-on-one and with hands on projects like harvesting alongside their new farmer-friend, or starting new non-profits, and some were more inclined to work on larger projects like building a multi-use community food marketplace in the heart of downtown. These data show that steps toward change at the local level are often drawn out by the time necessary (often years) to build larger networks of influence and networked projects. Motivation to change the food system is found to be generative and mobilizing amongst the groups, e.g.: small networked learning groups form to create projects on topics such as Food Not Lawns urban gardening, youth empowerment gardening, preserving food, seed saving and local food celebration events, all of which involve an understanding of barriers and possible solutions. For example, the Local Food Map project, launched during the second wave, documented that most of the local food products found in Larimer were grown in Weld and Morgan counties, a previously known fact to farmers only. The local organizers, realizing they did not have relationships in those locales or the social capital to quickly gain those relationships, asked farmers to help them in out to gain contacts and support for the project. The response took awhile. As each new project started, new learning curves steepened again. The need for more players to address the complexity of the food system issues revealed by this engagement in new social networking also increased communicative and instrumental learning situations. In another example, where and why people get food at certain places was reported to change by way of engagement in the food system by participants in each wave. In addition, the act of research to source seasonal and diverse local foods brought a new depth of knowledge about the food system, building a kind of relational decision-making tree. As people engage in solving various problems

in the food system, the pragmatic practical person evolves more of an instrumental orientation to how they can engage in local food system change. Therefore, this case also offers guidance to advocates, academics and associations that represent local food systems, in regards to the important process of knowledge generation, and of the role of network weaver, via the creation of learning sites that are necessary for transformational change and engagement. Additional insight as to the significance of the movement waves are offered later in this chapter, as lessons for the advocate and the researcher.

Transformative Learning

The examination of the social production of knowledge and transformative learning process as the catalyst of personal and community level engagement in local food and local agriculture demonstrates a broader empowerment resulting in what Wilkins (2005) has termed “food citizenship.” Performative and reflexive localism creates the critical conditions for learning and civic engagement. This study reveals the power of civic engagement to “set the learner on the path of transformation of normative ideologies” (Kerton and Sinclair 403, 2010). Evidence of change in the category of transformational learning include shifting perspectives, critical reflection, shifting norms and values as well as making major changes in one’s life. Identification with the food movement becomes personal as norm shifts and “be local” identity is gained. Throughout this thesis I documented the co-creation of the rise of the local food movement and the local economy values. The processes involved in the transformation of normative ideologies and civic engagement in the food system are the levers for change.

The evidence in this study links participatory epistemic social networks to engagement, providing a more complete explanation of the stages of becoming a participant, and of why and how civic food and agriculture happens. New social networks and communities of practice form around the production, procurement, and new preparation of foods involve new behaviors. New norms built on locally generated place-based knowledge and the experiences gained out of the projects create additional new frames of reference. Field observations and interviews show how the transformational learning that takes place in the intersection between instrumental and communicative learning results in life changing experiences. Community trainings and workshops related to engaging people in local problem solving occurred at many of the sites of learning described, particularly garden and farm-based instrumental learning locales.

All of the participants reported instrumental and communicative learning experiences in relation to their participation in the local food system. Shifting behavior to purchasing food raised or grown within 100 miles (or as local as possible) and the nuanced negotiation of the values and tastes of place are all instigated and reinforced via social networks. Thus, the pattern of network emergence and participation found in this study indicates the emancipatory potential of transformative learning situations. This research shows the transformational change process represents a re-embedding of the cultural relations to place, and a growing local food discourse of food citizenship.

Direct market norms, such as buying from the farmer, and an increasing amount of locales for building these relationships, generate more learning situations about the local food system and embed detailed knowledge, creating a community of practice. In addition, the social space of direct-market relationships translates and transforms the participant from consumer to engaged citizen. This, as Howells (2002) argues, is the common knowledge context that plays a central role in making meaning. Direct relationships and direct education result in new social networks, integration of ideas and an evolution of a personal and community-centric pragmatic truth about the local food system, valorizing relationship-based decision making. Thus, locally produced and consumed food is transformative as the exchange creates new connections to ways of knowing. Direct markets played an instrumental and communicative role that lead to transformative change. Similarly, sharing knowledge about the local availability of products, participating in research on the potential for import substitution and similar projects foment critical group reflection of the idealized and existing food system and reinforce the participant's interest in finding new ways to support the growth of the local food system.

Additionally, the data also describe how people, having engaged in transformational learning, also became the catalytic go-betweens, building social networks and systemic level knowledge. Significantly, the role of the go-between - particularly of farmers and chefs - in the local food movement determines what stories are told within the community and which knowledge is shared about those food items and ingredients that are being distributed, or included in menus. Go-between relationships build social networks and set the social structure for learning situations at all places of exchange. The new norm created by the local food movement emphasizes local-first ingredients, whole foods, making things from scratch, becoming locally engaged in topics of local-level decision making toward the vision of a

system that supports local small family farmers' access to productive land and water, and sharing food knowledge - and the food itself - convivially. Local food participants seek authentic experiences and create socially embedded and locally generated knowledge. Food consciousness is an ever-evolving result of learning about food culture and skills and at the same time being exposed to new ideas via the go-between.

These stories, my field work as a full participant, and my long-term experience working within the alternative agrifood movement, all point to the significant role that multi-disciplinary engagement plays in creating strong local networks. It also indicates the crucial go-between role of those in “professional” and organizational representative positions to reinforce and the potential to exclude or to empower via social networks. These key catalysts are crucial to sociological processes and to network and knowledge generation. Further, the local food movement, a form of civic agriculture, promotes citizenship and environmentalism within both rural and urban settings, through market-based models of economic behavior, and through common ties to place and physical engagement with that place. This research underlines that the ultimate power of the local food movement is the civic process by which people form new relationships, claim an identity beyond simply consumer, and have transformative experiences that lead them to become food system go-betweens, stakeholders and educators.

Systemic Knowledge

Systems level thinking builds agency and empowerment as participants gain identity, uptake norms, and transition from novice to teacher. An accretionary learning process helped people understand local and regional food system problems as well as global systemic complexity. Instrumental and communicative learning processes described in this study are significant in the building of stronger social networks and deepening engagement in systemic thinking. Learning about the local system creates the context for understanding globalization, as well as how industrialization has changed the food system. In addition to confronting globalization, climate change, and diet related disease, people participating in the local food movement connected the value of local food to developing local skills and a culture of food production and preparation. The experience and process of forming new relationships, common language, and shared knowledge all correspond to create a pragmatic place-based truth for the

participants. Knowing farmers names and the issues they are facing, get-togethers, local harvest drinks, communal dinners, family dinners, friends sharing meals, all indicate a shift in the social pattern of relating, and a new sense of who is part of the Be Local “community”. This cycle of accretionary and systemic learning is another path toward community of practice and social network formation, indicating that the performative nature of civic engagement via the direct market is key to systems level thinking.

Campbell (2004) notes that meaningful change involves the process of food system stakeholders working to gain a unifying discourse and an ability to set collective action. The epistemic processes found in this research describe the medium in which civic engagement about food develops and takes place. As participants learn more about who and where are the sources of place based knowledge they themselves become sources of information. Participants are inclined to take on leadership or educational roles, sourcing from local farmers, knowing and sharing the detailed history of the farmer’s lives and happenings on the farm. New values and expressions of identity integrate into community-produced tacit and explicit ways of knowing such as sharing food system knowledge. Locavores redefine the problem from different perspectives in ideal settings for discourse and education such as community gathering places like farmers’ markets, at the University during special events or talks, in downtown bookstores and at festivals. An example that came up during my time in the field was an invitation to an underground “Mad Farmers’ Dinner” led by a pack of twenty-somethings who work for local food or farm businesses, and college students who are interested in food gatherings. They share “real food with a story” with 100 friends and family members bellied up to long tables in an orchard at sunset. Events and social gatherings like this emphasize adventure, as participants engage in the new norm of local food as a cultural and civic happening. These events are often multi-generational and serve to establish locavore identity. They also impart the performative nature of expanding social and epistemological networks, as when the host reads Wendell Berry’s poem, Mad Farmer Manifesto to open the first ever Food, Gardening, Growing Town Hall meeting, and then, six months later one of the Tall Hall participants announces the Mad Farmers Dinner.

This study also found that a repetition of literature and national media attention and documentation of food system issues serve to verify the truth of these new local experiences and inform a systems-level perspective. National and international discussions about the illogical and destructive

elements of the food system have influenced the local food movement in Larimer County. The local food movement is very much informed by luminaries and national authors as they make declarations and stake solutionary claims, and challenge people to become food citizens. For example, journalist Eric Schlosser and urban farmer Will Allen, in the afterward of the transcript of the Prince of Wales' speech on a recent visit to the US, entitled "On the Future of Food", note that "as people feel more empowered in their own communities, they become better citizens; they see connections between their choices and the impact on those around them." Exposure to these ideas is proscriptive, allowing people to try-on and try-out new ideas or changes, and gain social support for making such changes by paraphrasing luminary statements. A local example of this is the establishment of the Be Local directives in Larimer County. Subsequent to publishing the Local Food Map, Be Local Northern Colorado hired their first staff members and published the "Buy Local, Eat local, Act Local," coupon book identifying and promoting local independently owned businesses. The formation of the Be Local Northern Colorado non-profit, the map about why and how to buy local, and the book on how to "Be Local", formalized the learning situations and scripted new normative behaviors. This local economy project swept up a core group of advocates of all ages for about a year as they learned first about the local living economy movement, while also gaining trust, assessing group skills, building community relationships with economic development professionals. Local knowledge sharing networks like these define normative solutions-based actions and also the regular practice of engaging in the complexity of what it means to build a local food system. Gaining systemic thinking within regional, national and global context is an important element of problem solving, and understanding the local complexity of the food system. A common language and a shared knowledge-base about the complexities creates space for understanding of cause and effect, as Mezirow points out in explaining his adult transformative learning theory:

We transform our frames of reference through critical reflection on the assumptions upon which our interpretations, beliefs, and habits of mind or points of view are based. We can become critically reflective of the assumptions we, or others, make when we learn to solve problems instrumentally or when we are involved in communicative learning. We may be critically reflective of assumptions when reading a book, hearing a point of view, engaging in task-oriented problem solving (objective reframing), or self reflectively assessing our own ideas and beliefs (subjective reframing). Self-reflection can lead to significant personal transformations." (Mezirow 1997, p. 7).

Throughout the waves, locavores develop a significant and intimate knowing of the issues, market constraints, practical barriers, the life and histories of farmers, and this knowledge evinces

collective know-how. The transformational change process also outlines how the local food movement is a creative outlet for engagement in reaction to a globalized food system, and demonstrates how local food movements can be a participatory response to systemic constraints. I therefore argue that evidence of the ability to think and act systemically is a critical capacity for food democracy. Understanding systemic complexity motivates reflexive and transformational epistemic responses to the constraints and practical barriers of globalization, industrialization and consolidation.

In addition, critiques of the existing food system are found to build identity with those in the local movement. In Larimer County, similar to Starr's 2010 findings about the local food movement, I found that local food identity and the "practices of commitment" (Behllah et al. 1985) relate to the community rituals built up around the constraint of specific market outlets, season and regional production capacity. These commitments to place, seasons, and potential community impacts ultimately build a local identity and are evidence of reflexivity. "Reflexivity usually refers to the capacity of an individual agent to recognize forces of socialization and alter his or her place in the social structure" (Giddons). I argue the process of transformative and reference shifting experiences leads to reflexivity in the case of local food. The knowledge that grows out of having a direct and hands-on engaged relationship with farmers creates space and inclination toward inquiry, and a continued cycle of reinforcing belief gained in the process of finding out the truths about the functionality (or as is more often the case, the disfunctionality) of the local food system.

Personal histories and the locally developed sense of constraints in Larimer County, Colorado led to a collective understanding of the various needs, generating new ideas about local food and agriculture potential and, a collective sense of being part of a movement. While this case study does not address equity, and the local food movement participants are mainly white middle class and educated, participants in this case study show they increased their overall knowledge base, while acquiring skills and knowledge necessary to be on the path toward addressing issues of food security and justice. Even if these advocates naïvely assume, as Goodman and DuPuis (2005) argue, that the localization of the food system will have some impact on neoliberal globalization, this case reveals the import of the epistemic nature of the local politics of place. The process of becoming a locavore is at the very least a generator of democratic engagement, and is revealing of the locus of civic agriculture. This case demonstrates the

process of reflexivity, through the documentation of the epistemology of the local food movement, and the “imperfect political process in which the local and the global make up each other on an every day basis” (Goodman and DuPuis 2005, 369). This study demonstrates the generation of norms, and engagement in reflexive creation of the local food economy and relationships.

This research shows how foundational frames of reference and the process of transformational learning leads to civic engagement, where the performative elements of civic agriculture and reflexive localism happens at a community level. Civic agriculture is necessarily related to a sense of place and public engagement, and is the embedding of local agriculture and food production in the community. As Allen (1991, 120) points out, “In one way or another, food is a salient issue for everyone and thus a potential moment of politization even if the immediate project objective seems small.” I further argue that understanding the complexity of the food system, and where food comes from is personal, as well as reflexive, and is integral to creating a sense of place. The myriad ways that food is embedded in local culture and values takes precedence over the general utility of the item, which is possibly why locavores haven’t yet addressed making local, healthy food accessible for all. While embracing health and access goals on paper, many local food advocates necessarily first focus on supporting the growth of farmers markets or other places of exchange like CSAs, as described in the first and second waves of the movement. In addition, the price of food does not initially matter to locavores as much as the embodiment of working toward first having the experience of manifesting good food values at the local and regional level. These findings reinforce the argumentative frame of the import of movement waves as a measure of community capacity. Civic engagement involves critical reflection at the community level creating common knowledge. As Delind (2010, 279) writes, “The process of becoming an inhabitant, a process that must certainly involve food also involves the cultivation of a civic “weness””. By the third wave, the engaged locavore often knows farmers lives and practices, and is connected to place and seasonality, as this research shows. Farmers are increasingly sharing the knowledge of their farm, animals, technical elements of their farming practices and their personal history. Indeed, these data show the collective action and identity of the locavore and the epistemic process is most evident in the fabric of every day life.

The rise of the Be Local food movement in Fort Collins, Colorado, as documented in this research, and in over 55 locations across the US (bealocalist.org) shows that civic engagement provides

valuable ways for people to reclaim local economic aspects of the food system along with community and public space. Additionally, the role of the University and the other sites of educational experiences can influence the broader perspective and potential of the movement. (As when the local food marketplace emphasizes shopping Fair Trade for the holidays at the Winter Markets in Fort Collins, and when the CSU Center for Fair and Alternative Trade Studies sponsors the Local Food Map, or on the other hand when the University Extension Agent is unwilling to spend his political capital at the local food advocate's table). The local food movement touches many aspects of our public and private lives, and these findings speak to the importance of interdisciplinary research and to the still-potential role of public sociology.

The Local Trap: Lessons for the Advocate and the Researcher

This research and collected data also inform the discussion on the dangers of unreflexive localism as put forth by DuPuis and Goodman (2005) and Born and Purcell (2006). Their arguments that the local turn naively assumes to challenge global networks, while working only at the local level, and that the potential for localization of the food system can be used an end in and of itself to the exclusion of social justice goals are well taken. Others have argued the local is problematic in that it tends toward locals-only blinders, resulting in xenophobia and defensive localism (Winter 2003; Heinrichs 2003; DuPuis and Goodman 2005; DuPuis et al 2011). However, I argue the "local trap" argument fails to take into account the level of impact the local food movement is having on local culture and potentially on society as a whole. The data in this study indicate an increase in participant's abilities to take on complex problem solving, which leads to further reflexivity. This study also shows that participants use the context of globalization, peak oil and climate change, and their intimate feeling of disconnection from the ability to affect global solutions, as motive to change their individual lives and communities. This research shows a rise a movement of people motivated toward civic engagement – despite of and in response to – a growing sense that corporate control has negatively influenced all of our social systems, including food. Increasingly, we experience food as a salient cultural and community issue around the table, in the doctor's office, in the media, in schools, and in workplace wellness initiatives. As Carolan (2012) notes, food in and of itself is complicated and problematic. "Instead of proclaiming what an idealized food system

looks like,” Carolan writes, “a reflexive approach chooses instead to focus on the processes used that will ultimately arrive at this end” (2012, 284). The local trap arguments and defensive localism critiques gloss over the multiple issues surrounding the processes by which we, as community members, begin to engage in complexity by way of understanding the food system.

However, movement trajectory and goals critiques serve as valuable reminders of the current limits to inclusivity while we embark on planning local changes to the food system. Along the lines of you get what you measure, locavores everywhere should take a regular accounting of their goals, in relation to the difficult topics of race, class and social justice. My experience in the field over the last two decades indicates that the complicating factors about the critique of localism (i.e.: “be cautious about making alliances with those not guided by the principles of inclusivity, while being mindful to include those who lack resources to join localism” (Carolan 2012, 284), lie in the accounting for and assessment of each wave of movement development. This research indicates that at the beginning stages (identified as the first, second and third waves in this research), reflexivity and engagement in civic agriculture and the steep systemic thinking learning curve entailed that groups engage in a complexity of changes in norms, values, networks, identity and relationships. For example, when Goodman and DuPuis (2005) argue a reflexive politics of place includes the “open ended story [in which] actors are allowed to be reflexive about their own norms and about the structural economic logics of production,” they could be describing the third, or perhaps even fourth and fifth waves of the local food movement. Yes, the first few waves of the local food movement have been focused internally and in some cases are examples of xenophobia and local protectionism that does not benefit the movement as a whole. Yes, attention toward creating systems that are intentional about inclusivity and reflexivity are still paramount to achieving movement goals. However, I further argue that it is unlikely that during these initial phases groups or communities would be able to also gain the skills needed for social justice work (unless they brought those skills to their local food movement). Therefore, it is possible that critiques of the local movement outcomes are premature. Network development processes must be taken into account in the critique, as a measure of vital foundational and capacity building work that precedes the ability to take on the more complex issues of social justice and equity. Some groups, like the (now disbanded) Community Food Security Coalition (CFSC), have been successful in offering social justice trainings and have advanced the skills of

alternative food systems advocates by way of offering technical training and assistance. The reach of social justice skills development remains limited in part because of the evolutionary process and the sociological nature of local food systems work, and because of resources for skills building. In my own experience of taking trainings from the CFSC and bringing those skills back to community-based work, it takes lot of personal tenacity and local political capital to push the norms in the day-to-day settings in which inequality is regularly reinforced. The best-case scenario is to offer capacity and community building skills, which train the trainers to give all community participants the tools necessary to change the local paradigms of inequality.

Related to assessing movement capacity, these findings suggest that systemic thinking, understanding complexity and unintended consequences are necessary benchmarks in assessing in local food movement development and ability to engage civically. I further assert that systemic thinking amongst key players may be one measure of the movement capacity. For example, the third wave of this study indicates that participants are only beginning to approach and understand what Carolan (2012, 284) summarizes as the “very material conditions shaped by the economic, political and social dominance of conventional food networks”. Just as increased civic engagement is required to address the multitude of barriers to change in the food system, the movement must evolve further in capacity to address systemic causes and outcomes in order to then take on social justice and equity issues. As the regional and collective local food movement advances and integrates professionals and interdisciplinary attention, it will also necessitate gaining on the ground skills necessary for community organizing (suggested inclusions here are group process facilitation, conflict resolution, and unpacking white privilege as a start). Food democracy and civic agriculture evaluations, therefore, must include the process of people understanding the broad web of connectedness that makes up the food system, and the process of embracing the ability to play a role in it civically. While this research does not directly address the issues of justice or inclusivity, it does show that once locavore advocates have had transformative food and agriculture experiences, they are often motivated to be civically involved in systemic problem solving. Therefore, I argue that the potential future fourth and fifth waves of this movement (evolving after systemic thinking and group organizing skills are gained), may build the ability of the advocates and food

system players to work within “hybrid spaces” and to begin to effect the change of some of the structures, rules and laws that favor conventional systems.

Conclusions and Future Research Suggestions

Overall, much of the literature examining alternative food systems offers suggestions for methodology and theory more than specific conclusions on the current success of local food systems, or the movement itself. I argue that the sociological themes emerging from this study, combined with the grounded theory frameworks offered by Kerton and Sinclair (2010) and Delind (2009), can serve as a model to document the success and development of the food movement on the ground, and inform the future of public sociology and agrifood studies. The sociology of knowledge offers a perspective on the rise of the local food movement that provides a more complete explanation of why and how food activism becomes a salient personal motivator that results in civic agriculture.

However, there is a lack of research on the power dynamic between local food systems players and the status quo food system to inform such action. There is also a need for research regarding what is working for the few who are able to fight for social justice issues, and how that approach differs from the rest who believe local food systems need to just be like the current system, just regionalized. We need to better understand how to empower people civically in taking back their food system, while documenting the developmental capacity of the movement waves. In addition, researchers need to include the sociological “quality” of food, which is “produced within relations of a community production and consumption” (Carolan 2012, 281). I argue that reflexivity means we (researchers and activists alike) must observe and report when the local addresses empowerment goals, such as how various people across communities, neighborhoods and rural places take decisions about what to grow, purchase, and consume into their own hands.

Significant to understanding how to support local food movement growth, this study outlines how projects play a role in engaging people in epistemic experiences within the local food movement. The identification of incipient transformative experiences could be used to assess the rise of local engagement. Delind's (2009) sketch of the process of becoming a participant in civic agriculture, involves

1) engagement in local problem solving, and 2) knowledge production toward greater self-reliance. Evidence of the development of food citizenry and civic engagement is a) participant assumption of shared public responsibility, b) taking on new projects, c) teaching about new knowledge gained/and/or participating in grassroots projects, d) changing ones job, e) creating participatory learning situations, and, f) making major changes to one's life – these are also the broad themes of transformational change evidenced herein.

This case elucidates the rise of food democracy in Larimer County, during the local food movement incipient phases. Since 2009, projects have grown and the capacity of the community to support a locally oriented food system has grown. New waves of the movement that were seeded during the second and third waves outlined in this case study have now taken root, such as the institution of in Winter Markets (a brainstormed market extension project of me and another key informant in the winter of 2005). As a result, new farms have sprouted up, and the number of CSA farms and members continues to increase, as have publications and events devoted to local food. Knowledge of the local food system continues to grow because of the epistemic nature of tools developed by the key players during the second and third waves, such as the first local food map, the annual Town Hall Meetings on food and gardening, and among other community-based projects, the efforts to form a food policy council fomented the four-county Northern Colorado Regional Food Assessment. The described cycle of accretionary knowledge and the process for transformative learning and social network generation indicates that the performative nature of civic engagement is key to the rise of the local food movement. In addition, performative reflexive localism and communities of practice relate to the critical conditions for learning and community engagement. This research also shows how empirical evidence of systemic thinking can be used in the evaluation of civic engagement.

I also offer to my fellow and future food system researchers that we must continue to hold up the social processes that lead to transformational change, and engage in more community sociology projects with advocates. The discoveries and processes documented in this study are replicable for future studies of the solutionary practices of regional locavore groups. The data in this study shows that the process of participation deserves further qualitative investigation in regards to the local trap critique, as locavores continue on the path, seeking to solve systemic food system problems. Further research is needed to

support the movement's activities as each local and regional food system attempts to embed the values of the local food movement into conventional food networks. On the ground investigation into the efforts to make alliances for change will also be necessary to build systems and networks that have the capacity to engage in equity work, and to confront those who currently benefit from limiting changes to the system. Toward this effort, future studies could create a typology of locally accepted ideologies and systemic and transformative learning practices surrounding relocalizing food production, as well as the sites of knowledge that make up and reinforce the relationship based economy that underpins the values of local and regional food systems. Future criteria for local food movement assessment could include evidence of systemic-level thinking as necessary for civic engagement capacity. In addition, future economic geography research is needed to examine the politics of regionalism, including how and if regional food assessments and other food policy council type actions that include local and the commodity market stakeholders effect or reduce the territoriality and tensions between commodity and civic agriculture.

The role of organizations in supporting or encouraging the rise of the local food movement (the driver of my original research questions) remains important. What I find most significant is how these findings relate to the development of local food movements all over the country. As a long-term on the ground food advocate, I can attest that the systemic barriers, the epistemological process and structural issues we were attempting to change in Colorado are very similar in other local and regional food systems. Across the United States, each region's agents of change – be they organizations or unaffiliated citizen's groups – confront the same socio-economic and structural barriers as they challenge institutional and corporate power. Collectively, regional food systems are stuck in the third and fourth waves as we all bump into very real practical barriers created by the 1980s farm crisis, the demise of the Agriculture of the Middle, and historical consolidation of various industries across the food system. For example, the most common three barriers to local food economy development across the national are currently a lack of processing (individual quick frozen and any type of packing or preservation facility at a scale that can serve schools or other institutions), a dearth of regional distribution companies, and various farming resources to support scaling up production to proliferate the farmer of the middle. In addition, various movements that relate to community development are converging with local food regionalization goals, aiming to change the status quo to create living economies, thriving communities, and cultural wellness –

all predicated on the fabric of a just and civically engaged society. Sociological qualitative assessments could significantly inform these movements on how to support the emergent democratic and collaborative engagement food systems in rural and urban settings. Understanding and identifying the waves of the movement evolution can be valuable for assessing each region's capacity for developing the civic nature of relationship economies. The pragmatic and performative nature of relocalizing any food system leads to civic engagement, and sociologists have a role to play in helping communities and organizations to leverage this knowledge. Local food advocates struggling to make incremental change could be taught to understand the value and methods of qualitative experiences by academic researchers to collectively understand the appropriate actions that increase capacity for change. Ideally, epistemological outcomes of transformative grassroots and organization-led projects will be incorporated into future studies that seek to understand the local food movement. Community capacity building projects, and those that offer hands-on, peer-to-peer instrumental and communicative learning situations to encourage community engagement are crucial to build stronger and more resilient networks.

In summary, this thesis examines the social production of knowledge within the local food movement, the sociological and transformative learning process that are catalysts of personal and community level engagement in local food and local agriculture, resulting in food citizenship and civic agriculture (Wilkins 2005; Lyson and Guptil 2004). My findings reinforce Kerton and Sinclair's (2010) grounded categories as valuable for understanding the process of transformative learning, and that food can be the entry point for sustainable actions in general. I also describe how the local food movement is inhered in the process of instrumental and communicative learning through local food projects. Weaving the meaning seeking process with new knowledge about the food system via the emergent local food social network, this study describes the fabric of transformative change. Participants in this study engaged in direct action and problem solving throughout the system, seeking meaning through socialization. This study also reveals how the epistemic nature of the relocalization of a food system engages a community of practice amongst various groups. These groups engage in problem solving projects, create new social networks and establish normative actions and knowledge sharing communications, informing how the local food movement emerged in Larimer County, Colorado.

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Appendix A: Interview Guides

Farmers/ Ranchers

What led you and others to market your (product) directly to consumers? (Was there a turning point that got you interested in growing for local markets?)

How did you decide to market your products to a specific region?

What are the main outlets for marketing what you grow (or produce) on your farm?

What percentage of your farm production is sold locally? (Has this changed much over the last three to five years? If so, how?)

What does local mean to you?

How would you describe the components of a local food system? (What are the main ways you can remember learning about the whole food system?)

How would you describe the relationships within a local food system?

How do you describe the goals and/or values of the food system?

How did you learn of these values?

How do you convey these values in your business? (What materials do you use?)

What sort of decisions do you find you have to make to support these values?

How would you describe your involvement in the local food system?

Who are the key people in the network of the local food system that you work with? (How did you meet them?)

How often do you interact with farmers, ranchers, chefs or local food enthusiasts? (What is the setting? Social? Business?)

When you gather with friends and family, do you talk about food and localism? (If so, what do you talk about?)

How have organizations played a role in the generation and acceptance of ideas surrounding an alternative food movement, such as local?

What organizations do you consider important in educating people about your local (product)?

How do you describe the organization(s) role in educating people about the concepts behind a localized food system? (What tools do they use to do this?)

How do you interact with those organizations? (Are you a member?)

How would you describe your individual concerns being incorporated into these organizations?

Of the different organizations you described, how do they work together?

How long have you been farming/ranching?

What do you grow (or produce) on your farm? (The full list).

How many acres do you grow (or raise animals) on for the local market and consumption? (Include information about non-local acreage if applicable).

How long have you lived in Colorado? (If not born here, what made you want to move to Colorado (or X County)?)

Is there something I didn't ask you that you think I should include in this interview?

Do you have any questions for me?

Can you think of anyone else I should interview on this topic?

Eaters/Activists

What led you to be interested in local food? (Was there a turning point that got you interested in local?) (When was that?)

How did you learn about the concept of eating (or cooking with) local food?

How would you describe the components of a local food system? (How did you learn about local food?)

Where do you get your local food? (From what farms or stores do you get your local food?) How did you find out about getting it there?

Do you shop at farmers' markets? (Which markets? How did you choose to shop there?)

How would you describe your involvement in the local food system?

Who are the key people in your life that you share your knowledge about local food with?

Do you share meals with people regularly? (If yes: do you mention to those you eat with that you are preparing local?)

When you gather with friends and family, do you talk about food and localism? (If so, what do you usually talk about? What is their reaction?)

How have organizations played a role in the generation and acceptance of ideas surrounding an alternative food movement, such as local?

What organizations do you consider important in educating people about local food and the food system?

How do you describe the organization(s) role in educating people (consumers and farmers) about the concepts behind a localized food system? (What tools do they use to do this?)

How do you interact with those organizations? (Are you a member?)

Of the different organizations you described, how do they work together?

How would you describe your own values about food? (How did you learn these values?)

How do you describe the goals and/or values of the local food system (as you understand it to be)?

How did you learn of these values?

Do you garden or grow your own food? (What do you grow/ produce)?

How much area (or how many acres) do you use to grow (or raise animals) on for local production?

How long have you lived in Colorado? (If not born here, what made you want to move to Colorado (or X County)?)

Is there something I didn't ask you that you think I should include in this interview?

Do you have any questions for me?

Can you think of anyone else I should interview on this topic?

Food Producers/Chefs

What led you to be interested in local food? (Was there a turning point that got you interested in local?) (When was that?)

How did you learn about the concept of eating (or cooking with) local food?

How would you describe the components of a local food system? (How did you learn about local food?)

How would you describe the relationships of your local food system? (How does local differ from the relationships you may develop through, say using Cisco to source ingredients?)

Where do you get your local food? (From what farms?) How did you find out about getting it from there?

Do you shop at farmers' markets? (Which markets? How did you choose to shop there?)

How would you describe your involvement in the local food system?

Who are the key people in your life that you share your knowledge about local food with?

Do you share meals with people regularly? (If yes: do you mention to those you eat with that you are preparing local?)

When you gather with friends and family, do you talk about food and localism? (If so, what do you usually talk about? What is their reaction?)

How have organizations played a role in the generation and acceptance of ideas surrounding an alternative food movement, such as local?

What organizations do you consider important in educating people about local food and the food system?

How do you describe the organization(s) role in educating people (consumers and farmers) about the concepts behind a localized food system? (What tools do they use to do this?)

How do you interact with those organizations? (Are you a member?)

How would you describe your individual concerns being incorporated into these organizations?

Of the different organizations you described, how do they work together?

How would you describe your own values about food? (How did you learn these values?)

How do you describe the goals and/or values of the local food system (as you understand it to be)?

How did you learn of these values?

Do you garden or grow your own food? (What do you grow/ produce)?

How many acres do you grow (or raise animals) on for local production?

How long have you lived in Colorado? (If not born here, what made you want to move to Colorado (or X County)?)

Is there something I didn't ask you that you think I should include in this interview?

Do you have any questions for me?

Can you think of anyone else I should interview on this topic?