

TRANSFORMATIVE LEARNING AND LOCALIZING FOOD:
INGREDIENTS OF KNOWLEDGE CREATION AND RESISTANCE

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By

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ABSTRACT

Throughout the world, both producers and consumers of food are critically analyzing and enacting changes away from the globalized, industrial paradigm associated with conventional practices in agriculture and food production/distribution/consumption and towards the localization of food networks. Contributing to growing resistance movements aimed at gaining greater food security and sovereignty, local food discourses are strengthened by a combination of political, socio-economic, ecological, and cultural reasoning. This critical ethnography examines how knowledge and meaning is constructed in the context of an alternative food discourse through the personal and shared experiences of six participants in rural Saskatchewan. Further, the study explores the factors that influence participants' sense of personal and/or collective transformation. Data were collected over six months using the methods of participant interviews, a focus group, and observation. Data analysis used temporal sequencing of meaning-making factors or "ingredients" that were categorized to detail how the creation and affective use of knowledge in transformative learning occurred in the context of localizing food networks in rural Saskatchewan.

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DEDICATION

I surmise that my sizeable, plebian hands represent an inherited trait I acquired from the generations of European peasants I've descended from. Farmers who travelled the seas for a new world to work the soil, to fear the weather, save the precious seeds, and celebrate the harvests. To my blood relatives in the Hanson, Klukewich, Mattson, and Tomaschuk families that both relished in, and ached from, working the land I dedicate this work.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Food and agriculture are both dynamic and sensitive issues. The way in which food is produced, marketed, distributed, and eaten is analyzed and debated across a range of locations that involve organizations, government, industry, and communities. As one aspect of these debates and in response to some people's view that globalized, corporate food systems are adversely affecting environmental sustainability and a well-functioning society, "[there are] an increasing number of citizens in many parts of the world organizing around the concept of *local food*" (Kimura & Nishiyama, 2007, p. 49). As further noted by Canada's National Farmer's Union, "the movement towards fair and sustainable local food systems [however] is not new, and it is not a fad, but it is experiencing a coming of age around the world" (NFU website, 2009).

This study examines the experiences of six rural participants in Craik, Saskatchewan who have been involved in localizing food networks in the region. Through a lens of critical ethnography, this study explores the development and use of knowledge by these individuals with local food interest and the factors that contributed to their personal and/or collective transformation. Data were collected over six months using qualitative methods of participant interviews, a focus group, and observation. From the process of data collection emerged the food-related metaphor of "ingredient" that signifies various determinants in knowledge uptake as they existed in childhood and adult experiences. Ingredients were selected based on the relevance of participant stories to knowledge creation and utilization and transformative learning as exhibited in the discourse on localizing food in their community. Ingredients were categorized

into “contributing ingredients” in knowledge creation and transformative learning and “inhibiting ingredients” that deter processes for transformation.

Study Purpose

The main purpose of this study is to gain insight into knowledge creation and utilization as they contributed to personal and collective transformation in the context of an alternative, local food discourse in rural Saskatchewan. Specifically, using data gathered through a range of qualitative methods, I attempt to ascertain how knowledge has played a role in motivating research participants in relation to their interests in local food. The research then seeks to better understand the connections and contradictions of knowledge utilization in transformative learning.

As a key term used throughout the course of this research, local food “discourse” is used to imply an emerging alternative dialogue that draws attention to, and critiques, conventional agri-food systems and industrial/globalized practices surrounding food production, consumption, distribution, and socialization. Generally, alternative food discourse within local contexts aims to focus on food as a site of cultural struggle where language, power, and politics are seen to be involved in issues of food production, consumption, and distribution. Participants in this study are part of an emerging food discourse specific to rural Saskatchewan.

Research Questions

As the study evolved, I modified the research questions to reflect the participants’ voices as well as my own interpretation of the data gathered in relation to the methodology of critical ethnography. I have, without hesitation, learned that studying epistemological orientations in relation to transformation is a wide subject and therefore, have narrowed the focus to research questions that are most salient and useful:

1. How has knowledge been created and used to develop and deepen participants' interests in local food in the rural research site?
2. When, or in what ways, is knowledge an influence or motive for personal or collective transformation in this study? What other significant factor(s) serve a function in transformative learning?

Study Relevance

Practices associated with the “food cycle” - from agriculture to nutritional needs to food preparation to composting - are rooted in the histories, socio-cultural contexts, and relationships to the land by which people are shaped, as a plethora of authors have discussed (e.g., Berry, 1981; Friedman, 2003; Kroma, 2006; Shiva, 2007, among many others). As Right Livelihood Award winner, Frances Moore Lappe (2002) suggests:

Food is about more than fueling our bodies. Embedded in family life and in cultural and religious ritual, food has always been our most direct, intimate tie to a nurturing earth as well as a primary means of bonding with each other. Food has helped us to know *where* we are and *who* we are. (p. 37)

The rapid rate of change in food cycle practices, as introduced over the last fifty years in particular, stem from both ideological and technological shifts associated with the rise in capitalist industrial growth and international trade. Food consumption practices have followed this transformation, where today's average North American family meal ingredients have typically travelled at least 1,500 miles to arrive at their table (Smith & McKinnon, 2007).

Reaction to the way food is currently produced, processed, and accessed as a result of large-scale industrialization of global food systems, has fostered the creation of a socio-ecological “food movement” with a wide distribution of interest in international, national, and

regional or local settings. Although this movement is decentralized, with the range of emphasis dependant on a local culture and context, overlapping themes within its discourse include: access to safe and nutritious local and/or organic production, biodiversity of plant growth, presence of slow food (versus fast food), gender equality, land reform (particularly in the majority world), fair economic trade, working conditions of farm workers, and food sovereignty (local control over production and land rights) (Allen, 2004; Castillo, 1998; Desmarais, 2007; Koc, 1999; Lappe, 2002; Pollan, 2007; Shiva, 2000). Additional concerns over genetically engineered crops, intellectual property, “fuel not food” agricultural production, agricultural trade, and regulations have built momentum towards a global food rights agenda (Kneen, 1999; Shiva, 2007).

In Saskatchewan, many individuals and groups associated with local food interests advocate for issues such as food security, access to locally grown/produced food, sustainable eco-farming, and northern/rural economic development (e.g., Amy-Jo Ehman, Child Hunger and Education Program, Saskatchewan Organic Directorate’s Food Miles Campaign, among others). With Saskatchewan having almost half of Canada's total cultivated farmland (Saskatchewan Agriculture, accessed May 2, 2009), an interest in locally grown food seems warranted, especially given the province’s rich history in agricultural and rural life.

Some studies specifically exploring the relationship of knowledge utilization and agricultural paradigm shifts exist within academic literature (e.g., Carolan, 2006; Hassanein & Kloppenburg, 1995; Roling & Wagemakers, 1998). However, few studies have positioned themselves to study these occurrences *in Saskatchewan*, particularly from the angle of transformative learning within the context of local food discourse (further discussion in Chapter Two). This research contributes to academic aspirations to understand and contribute to

processes of knowledge transfer, and to food activists' desires to transform agricultural systems within the local context of Saskatchewan.

The relevance, therefore, of this study is three-fold. First, as a main focus, the research investigates the relationship between knowledge creation and personal and collective transformation. Second, and as an extension from the first point, the research investigates the significance of local knowledge and meaning-making influences in relationship to studies of knowledge transfer in a rural Saskatchewan site. And last, the research explores a developing resistance and discourse surrounding global, industrialized agriculture, and food systems as they are interpreted and enacted in one rural Saskatchewan area.

CHAPTER TWO

LITERATURE REVIEW

This chapter offers a broad framework drawn from selective theoretical and practical literature pertaining to: localizing and alternative food networks, learning theory, and knowledge creation and utilization literatures. Further, I provide an overview of some of the issues in the literature on knowledge transfer and suggest how the processes of knowledge creation and utilization might be enhanced as divergent knowledges interact. This literature review aims to follow a similar sequence to that of the study more broadly, with processes of learning, knowledge creation, and knowledge utilization being investigated for their connections to transformation within a local food context. To begin this chapter, I establish the study's "root" in the literature on local food movements.

Alternative Concepts Pertaining to Food and Agriculture

Salient issues from studies of food and agriculture that help "position" localizing food networks include alternative ideologies and practices developed throughout history in food-related resistance movements. Documented resistance or "alternative" movements to counter state policies of food and agriculture date back as far as the seventeenth century with abolitionist protests over spices, tea, and other imports resulting from acts of slavery. In addition, anti-poverty protesters like the "Diggers" in England (Belasco, 2007) fought for "food justice" in the 1700's. The late 1800's to early 1900's witnessed changes in agricultural production as a result of industrialization, with responses including a new surge of resistance towards mechanization

and some processed foods (Vileisis, 2008). Resistance or counterculture movements of the 1960's to 1970's defied the growing corporatization of food systems and offered (re)newed farming and gardening practices. This study's context focuses more specifically on the late 20th century's reactions to food production, processing, and marketing, which take place often at the expense of human and environmental health, and on how recent alternatives to conventional food systems are being explored and played out.

Agriculture's conventional dominant technology/policy model (Goodman & Redclift, 1991) refers to modern-day food system's emphasis on competitive technological innovation, farm level accumulation, and

expan[sion] of markets for agro-industrial inputs such as farm equipment, seeds, and agri-chemicals. . . . [This model is] nurtured by economic interdependence and reinforced by political alliances [believed to be] at the root of the transformation and current economic, and environmental crisis of modern agriculture. (pp. 102-103)

Further description of this model also makes note of the alignment with global commodity market systems, studied by Atkins and Bowler (2001) and evaluated by: Allen and Sachs (1993); Friedman (2003); Kneen (1989); Marsden and Symes (1984); Tansey and Worsley (1995), among many others. The literature detailing alternatives to this dominant technology/policy model is both academic and non-academic, or "grey" in nature, and engagement with both reflects the true spirit of this study as guided by valuing multiple ways of knowing (Denzin and Lincoln, 2008).

Seeds of Resistance: Becoming a Locavore

“We are food: we eat food, we are made of food, and our first identity, our first wealth, our first health comes from the making, creating, giving of good food” (Shiva, 2007, pp. 35-36).

Produced and extracted from the land, food links cultures, market systems, histories, and humans to natural life. Food has long been regarded within culture as the hub in the web of existence as it encapsulates the human experience in the most basic and primal of ways; it connects us to the earth as a means of survival. However, where food may connect people to the natural world, the reality is that most North Americans (among others) now purchase vast quantities of processed food and trucked-in produce so that “knowing about our foods has become much harder, especially as more and more of them come from distant lands” (Vileisis, 2008, p. 237).

The way in which food is produced, processed, marketed, distributed, and eaten is analyzed and debated across a range of locations and involves organizations, government, industry, academia, and community members. As one aspect of these debates, and in response to some people’s view that globalized, corporate food systems are adversely affecting environmental sustainability and a well-functioning society, “there is currently a wide debate on the relocalisation of food production and consumption” (Fonte, 2008, p. 200). Concerns about global agro-food systems include environmental, socio-political, and economic issues, such as the emissions of greenhouse gases as food travels long distances; or the lack of citizen and farmer participation in agro-food policies, decision-making, and trade.

The concept of becoming a “locavore,”¹ or one who eats food from within a commonly-bound radius of 100 miles or from a known foodshed (area of land from which the food is drawn) is growing in popularity and complexity. Increasing numbers of popular books on the subject (e.g., Kingsolver, 2007; Miller, 2008; Pollan, 2006; Roberts, 2008) detail the positive attributes of bringing producer and consumer closer together through farmer’s markets, community supported agriculture (CSA), and food networks. Proponents argue local food is safer for consumption, more supportive of local economies, nutritious and ecologically sound, and also holds more opportunity for participation in agro-food decision-making as compared to food grown mainly for export food markets through large-scale mono-agriculture (Harcourt & Escobar, 2005; Henderson in Magdoff, Foster & Buttel, 2000; Lang & Heasman, 2004; Lappe, 2002; Kneen, 1989; Kuyek, 2007; Shiva, 2007). Still, some analysts critique the assumption that local food is a panacea for a dysfunctional global, capitalist food system (Allen, 2003; Blue, 2009; Guthman, 2004; Winter, 2003), while others challenge the notion that local food transportation decreases fossil fuel emissions (Mariola, 2008; Saunders, Barber, & Taylor, 2006). Many of these same critics are careful to assert, however, that an alternative agrifood paradigm shift is (still) crucial for long term sustainability but contend that such alternatives are ineffective in relation to substantive social change without engaging people most disempowered by current agriculture systems (e.g., women on farms, immigrant labourers, visible minorities, and the poor) (Allen, 2000; Allen & Sachs, 1993; Blue, 2009). Holloway (2007) asserts that a methodological framework for “going beyond” the dichotomy between conventional or alternative agriculture is required. She acknowledges “the relational contingencies of what is regarded as alternative at

¹ The term *locavore* was coined by four women from the San Francisco area – Jen Maiser, Jessica Prentice, Sage Van Wing and DeDe Sampson on Environment Day 2005 (OAD, accessed May 16, 2009). Locavore won Oxford American Dictionary’s word-of-the-year in 2007 to acknowledge the growing trend in local food interest.

any one time and in any one space” (Holloway, as cited in Fonte, 2007, p. 201) may, in fact, become conventional at another time and place in history.

Literature on knowledge utilization in localizing food networks is well documented in Fonte’s (2008) study exploring ten cases of food relocalization efforts in Europe. In her study, she suggests there are two distinct perspectives regarding the localization of food networks, with goals either reformist or radical in nature across differing economic contexts:

[T]he reconnection perspective . . . takes into account grass roots initiatives [aimed] at rebuilding the link among producers and consumers in an “interpersonal world of production” [i.e. produce sold only in supermarkets]. . . . The origin of food perspective . . . repositions local food production in relation to values associated with territory, tradition, and pre-industrial production practices. . . . Traditional agricultural techniques and products are recovered and valorized (p. 202-203).

Fonte’s (2008) reconnection perspective includes rural revitalization and closer relations between food producers and consumers. Consumers are inclined to support producers they know and trust in the goals of attaining safer and healthier food. The origin of food perspective includes environmental improvements as food moves to its original production methods that focus on pre-industrial agri-food practices that disregard monocultured crops, large-scale farming, and limited seed diversity. The origin of food perspective considers various traditional, social, and cultural connections where food was central to the identity of specific locations. While the study does not penetrate North American accounts of localizing food, Fonte (2008) does suggest that a reconnection perspective may be stronger in United States than the origin of food perspective.

Local Food in Saskatchewan

As already stated, historically in Saskatchewan, people had a deep relationship and dependence on food that was locally gathered, hunted, grown, and prepared. However, with changes in demographics, globalization, and industrial forms of agriculture², both eating and producing food has changed over the past fifty years or so. Interest by some of the province's producers and consumers in re-developing a stronger association with, and economy including, local food, may in part be attributed to this historical connection.

Academic studies about a local food movement in Saskatchewan, per se, do not exist, although related studies document, for example, the work of selective organic farmers, collective kitchens, and alternative/sustainable agricultural paradigms in the province (respectively, Bronson, 2007; Engler-Stringer, 2007; Abaidoo and Dickinson, 2002; Beckie, 2000). Topical information regarding local food in Saskatchewan is more readily obtained from alternative sources, particularly those extracted from electronic media. These include: restaurants and recipe books/sites emphasizing local fare (e.g., Calories Bakery/Restaurant); advocacy and non-governmental organizations (e.g., Beyond Factory Farming, Child Hunger and Education Program, Food Secure Saskatchewan); farm organizations (e.g., National Farmer's Union, Saskatchewan Organic Directorate); alternative press and freelance journalists' websites/blogs (e.g., Amy Jo Ehman's "Home for Dinner," Briarpatch, Prairies North magazine, Vert-à-go); and maps or directories indicating local food producers (e.g., Eat Well Guide, Lofo, Vert-à-go).

The context of local food in Saskatchewan, as elsewhere, is part of a larger sustainable agriculture (SA) discourse, which has "attracted a larger, broader following than previous

² Since World War II, in particular, ecliptic changes to agricultural production, trade and food policies have taken place forcing foreclosure on many small and mid-sized family farms. In Saskatchewan alone, the numbers of farms shifted from 112,018 in 1951 to approximately half - 63,431 in 1986 - and further reduced to 44,329 by 2006. In that same period, farms in Saskatchewan averaged in size from 550 acres in 1951 to 1,449 acres of land in 2006. (Census of Canada, Agriculture statistics, consulted May 4, 2009).

agrarian movements, such as those in support of family farms or agricultural labour” (Allen & Sachs, 1993). As part of this SA discourse, with organic food’s popularity and consumer demands for healthier, non-fast food options, “local food [is a] revolution now in season” (Martin, 2009, BU1).

Domains of Learning

As one of the foremost critical theorists on the philosophy of language and science in social theory, Jurgen Habermas provides a comprehensive foundation for understanding knowledge and learning. In his theory of communicative action, Habermas (1984) suggests that human interest is grounded in our relationships to the environment, other people, and power (as cited in Mezirow, 1991). Habermas (1994) proposes that this human interest generates three types of knowledge: technical, practical, and emancipatory.

Associated with these three types of knowledge are two major domains of intentional learning - *instrumental* and *communicative* – each with “different purpose, logics of inquiry, criteria of rationality and modes of validating beliefs” (Mezirow, 2000, p.8). Instrumental learning pertains to human interest in technical areas and is associated with acquiring skills or knowledge in order to control the environment or other people (e.g., assessing practice). Communicative learning is related to the practical area of human interest - to understanding what others mean when they communicate with you (e.g., feelings, intentions, or values). A third learning domain, which has implications for both instrumental and communicative learning, is considered to be transformative or *emancipatory* learning. This third type of learning is elicited by processes of reflection and has both individual and social dimensions (e.g., appraising one’s cultural assumptions).

Instrumental learning is considered to be based on objective, transmittable knowledge, communicated through formal language and constituted “as the sum of those symbolic relations that can be produced according to rules [of inference]” (Habermas, 1972, p. 192). It is the domain of empirical-analytical inquiry that is established through the technical and transcendental conditions of action itself (Habermas, 1972). Instrumental learning is aptly associated with the “hard sciences” such as physics and with experimental designs, and is presupposed on formal language and sets of codes or rules. The messages transmitted in instrumental learning are based on a cognitive interest in determining reality and establishing a framework for positivistic inquiry. Instrumental learning is constituted by the meaning gained from cause and effect events (e.g., how to refine one’s skill in an experiment or game) and “errors are made in applying rules of inference or reasoning” (Mezirow, 1991, p. 144).

For communicative learning, the “grammar of ordinary language . . . governs the non-verbal elements of habitual mode of life conduct and practice. . . link[ing] symbols, actions, and expressions. It establishes schemata of world interpretation and interaction” (Habermas, 1972, p. 192). Communicative learning uses frames of reference, as established from previous experience, to interpret the world. These interpretations are historical-hermeneutic and often associated with descriptive social science, history, aesthetics, legal, ethnographic, literary, and other such studies (Mezirow, 1991). Communicative learning involves the practical interest in social relationships. This form of learning establishes our interpretations of others and how they are perceived by us through communication and culture.

Emancipatory learning is a less frequented type of human learning. Mezirow (1991) contends:

The emancipatory interest is what impels us, through [critical self] reflection, to identify and challenge distorted meaning perspectives. . . in the way our history and biography have expressed themselves in the way we see ourselves, our assumptions about learning and the nature and use of knowledge, and our roles and social expectations and the repressed feelings that influence them. . . . Emancipatory learning often is transformative. (pp. 87-88)

Emancipatory learning is communicative in nature as roles, values, and social expectations are critically assessed amongst peers, however emancipatory learning can affect technical know-how such as in the ability to apply new skill. While most adult learning is acquired through instrumental and communicative means, emancipatory learning constitutes a necessary element in processes of learning about and validating the environment, other people, and ourselves (Mezirow, 1991). Emancipatory learning involves critical self-reflection and appraisal of relationships to others and the surrounding world, as one attempts to seek validation or greater understanding of these relationships or social factors. In emancipatory learning, “old meaning schemes or perspective [are] negated and [are] either replaced or reorganized to incorporate new insights” (Mezirow, 1991, p. 88).

“Meaning schemes” refers to cause-effect sets of habitual experience that occur as a result of interpretations gained from values, knowledge, and feelings. An example of changes to meaning schemes – which are commonplace in adult learning - might be the acquisition of a new language or learning roles in a new job. Similar to Kuhn’s (1962) notion of paradigm, the wider focus in transformative learning is Mezirow’s (1990) “meaning perspectives” that refer to “the structure of assumptions [or orientations] within which new experience is assimilated and transformed by one’s past experience during the process of interpretation” (p. 2). Meaning

perspectives are the broad frames of reference which orient individual knowledge and belief systems. Meaning perspectives thus relate to communicative and emancipatory learning, where new orienting frames of reference are constituted, and can be categorized into three areas: 1) epistemic meaning perspectives (the way we know and the uses of that knowledge); 2) sociolinguistic meaning perspectives (culture, language, philosophy); and 3) psychological meaning perspectives (self-concept, inhibitions, tolerance) (Mezirow, 1991).

Meaning perspectives involve *establishing criteria* for making value judgments and beliefs, and stem from one's socialization, culture, and gender, and "involve ways of understanding and using knowledge and ways of dealing with feelings about oneself" (Mezirow, 1991, p.3). For Mezirow (1991) through his influential work in Transformative Learning Theory (TLT), the term "perspective transformation" involves three essential aspects:

(a) an empowered sense of oneself, (b) more critical understanding of how one's social relationships and culture shaped one's beliefs and feelings, and (c) more functional strategies and resources for taking action. Taking an action is an integral dimension of transformative learning. (p. 161)

In his empirical study on adult women returning to college later in life, Mezirow delineated a ten-phased approach to perspective transformation that define it as process of critical self-reflection that includes reflexive discourse in the context of the social world. The ten phases rely on learners making difficult decisions and undertaking actions that involve overcoming emotions like fear, guilt, and shame, while simultaneously integrating what they have learned about epistemic, sociocultural, or psychic forces into their changed worldview (Mezirow, 1991). In essence, the task is to move beyond what Takahashi (in O'Sullivan, 2004) refers to as a *modern industrial worldview* (my emphasis) – a mechanistic, dualistic view of

mind/body, mind/spirit, reason/emotion ontology through transformative learning consisting of particular epistemological shifts from the dominant, socialized logic to a more self-authoring mind. Transformative learning as a process involves a spiral of knowledge creation, with learners critically reflecting and re-reflecting on prior concepts and terms of understanding while simultaneously moving towards a change in action (Kegan, 2000).

The “action” deriving from perspective transformation refers more aptly to reconfiguring learner’s previous assumptions and orientations then manifested in changes to personal choice, behavior, and lifestyle change. Mezirow (1991) contends that collective change is also possible within processes of critical reflection, largely because of the social dimensions of discourse, validation, and seeking new relationships when perspective transformation is enacted. Others reiterate the potential for personal transformation coalescing with social transformation, as individuals become critically aware of themselves and the world and act differently with others within it (for example, Code, 2006; Desmarais, 2007; Noddings, 1984; Takahashi in O’Sullivan & Taylor, 2004). On collective or social transformation Mezirow (1991) asserts,

New [social] movements both provide an environment and serve as a catalyst for fostering personal transformations, define the future topics of adult transformation, link social transformation with personal transformation, and help people understand that transformations are based upon personal emotional commitments to learning our way out of specific dilemmas associated with social concerns. (p. 189)

Mezirow’s work on TLT outlines the connections between personal and social transformation, with one influencing the other’s possibility. Without a personal commitment to changing perspective meaning on an individual basis – that is, changes to psychological,

behavioural, and convictional (revising belief) - social transformation cannot and does not occur. However, others question the ability of TLT to enact changes at a larger social level (West, 1996; York & Marsick, 2000); while others do not differentiate personal transformation from collective transformation (Friere, 1970), as transformation in meaning must always produce a change in action. Friere's concept of critical reflection, or conscientization, involves a rigorous critique of social, political, and economic ideologies that culminate in social change when praxis (action and reflection) is engaged.

This study does not aim necessarily to prove or disprove TLT's orientation to collective transformation, but rather seeks to apply its theoretical foundation of personal and collective transformative learning as a way of understanding participants' interests in procuring local food both for themselves and in their community. According to TLT, socio-cultural and economic changes towards a localized food system would necessitate changes in perspective meaning at the personal level.

The Constitutive Elements of Knowledge and Knowledge Transfer

We must not simply speak of knowledge but of knowledges, since all knowledge is relational and can only be understood within the context of its production, its distributions, and the way it is taken up or consumed by different individuals and groups . . . knowledges are invariably mutable, contingent, and partial; furthermore, their authority is always provisional as distinct from transcendental. Knowledges may, in fact, possess the power of truth but in reality they are historically contingent rather than inscribed by natural law; they emerge, in other words, out of social conventions and sometimes in opposition to them. (McLaren, 1991, p. 27)

The above passage by educational theorist Peter McLaren presents a number of ideas on the constitutive elements of knowledge. Knowledge does not exist as a singular entity but is co-produced and relational, making the process of knowledge creation a communal act with sets of players. Knowledge is also contingent on place-specific experiences and events that produce unique identities and forms. Where knowledges emerge out of history, they are neither locked in time nor hold the power of absolute truths. As part of focusing on processes of transformation and meaning-making, or the creation of knowledge, McLaren's passage reminds us that knowledge is constituted by a range of relational elements. As similarly asserted by Mezirow (2000), meaning-making is a continuous effort of negotiation, validation, and critical reflection "as there are no fixed truths or totally definitive knowledge" (p. 3). Knowledges arise out of multiple identities and worldviews.

For Mezirow (1990; 2000), knowledge is constituted by "assumptions on which habits of mind and related points of view are predicated [by] epistemological, logical, ethical, psychological, ideological, social, cultural, economic, political, ecological, scientific or spiritual, or may pertain to other aspects of experience" (2000, p. 19). Feminist, Buddhist, post-structural, constructivist, and postcolonial, among other theoretical stances, articulate the need for responsible and inclusive remapping of epistemic territory. Such remapping challenges the assumption that "truth" is an endorsement of particular knowledge claims, namely those associated with techno-scientific frames of reference. Ranking certain types of knowledge as "fact" stems from a post-Enlightenment, positivist epistemological understanding that assumes the superiority of reductionist knowledge generation. As ecologist Lorraine Code (2006) writes,

[A] responsible remapping of epistemic and socio-political terrains, animated by an informed attentiveness to local and more wide-ranging diversity and by a

commitment to responsible ideals of citizenship and preservation of the public trust . . . [is] notably absent from putatively universal, a priori theories of knowledge and action. (p. 4)

A positivist epistemology associated with dominant cultural values excludes other frames of reference that often derive from marginalized groups of people where diverse contexts of ethnicity, class, gender, and social status are at play, all of which are necessary considerations and factors for this study.

In attempting to expose the limitations of positivistic epistemologies, this study explores the interconnections of knowledge claims that not only inform, but also those knowledge(s) that incite change, imagination, and critical reflection, such as tacit knowledge, understood as that which occurs through perception and experience. In the next few paragraphs I describe the ways studies in knowledge transfer – as a process for multiple knowledges interacting – might improve the understanding associated with transformation towards localizing food.

While academic disciplines vary widely in their approaches to studying knowledge, many assert that the origins of human knowing (epistemologies) are based on relational interdependencies among activity, meaning, cognition, learning, and history (Code, 2006; Corburn, 2005; Kuhn, 1962; Lave and Wenger, 1991; O’Sullivan and Taylor, 2004; Whitehead 1929). These interdependencies culminate in meaning-making or the creation of knowledge, which in turn, is transmitted, reflected upon, then subsequently utilized or altered.

In an effort to describe the ways in which knowledge can be transmitted and utilized, theorists have applied the term “knowledge transfer³” which has been defined as “the exchange,

³ Throughout the research literature, different terms have been used to describe concepts that are similar in meaning and used interchangeably. Depending on the discipline, this includes use of the term knowledge transfer synonymously with that of “knowledge” management, mobilization, transfer, translation, and utilization. I prefer the term knowledge utilization as it implies more than one-way communication and a seemingly action-oriented

synthesis and ethically-sound application of knowledge – within a complex system of interactions among researchers and users – to accelerate the capture of the benefits of research” for public policy, services, and practical understanding (Canadian Institute of Health Research website, consulted on May 2, 2008). Studies related to knowledge transfer extend across numerous academic disciplines including health, management/business, policy, education, and sociology. These disciplines apply a number of approaches and models to explain the determinants, processes, and results of transferring knowledge from one source to another (e.g., local knowledge to academic knowledge).

In education, a trickle-down theory of knowledge transfer “suggests a relatively passive *carrying over* and deployment of learning from one situation to another once learners recognize the *similarity* between those situations” (Carragher & Schliemann, 2002, p. 19). The issue of “how knowledge acquired in one situation applies (or fails to apply) in others situations” (Singley & Anderson, 1989, p. 1), has long been regarded as one of the most important concerns in learning theory, drawing attention to the importance of context (e.g., place, culture, epistemology), as well as the motivations of individuals involved in making the transfer (Gitlin, Burbank, & Kauchak, 2005). Efforts to improve the approaches used in knowledge transfer are associated with “increased attention to accountability, greater awareness of ethics in research and the globalization of knowledge, along with an increasing recognition in the ways in which knowledge is constituted by interactive knowledge transfer” (Backer, 1991, p. 120). It is the motivation to view knowledge utilization as an interactive model that works towards complimentary, multi-knowledge collaboration that I find compelling and relevant for this study.

approach. Some literature discusses knowledge transfer as a study, with knowledge utilization as an interpretation of how the study proceeds in practical terms.

This concept is elaborated upon in critical literature sources on transfer and trickle-down theories of knowledge usage (see Van Kerkhoff & Lebel, 2006; Rowley, 2006).

In knowledge management studies, the uses of differing knowledge claims (such as academic and tacit) within organizational and business settings (e.g. Jashapara, 2004; Mumford, et al, 2000; Nonaka, 2005; Nonaka & Takeuchi, 1995; among others) has rapidly accelerated with researchers paying special interest to the role of “developing classifications of knowledge and then using these to examine the various strategies, routines and techniques through which different types of knowledge are created, codified, converted, transferred and exchanged [for business improvements]” (Orlikowski, 2002, p. 250). For example, Nonaka and Takeuchi (1995) examine the value of tacit knowledge among staff members in organizational settings and how this otherwise informal, intuitive, and experiential knowledge could be converted into explicit knowledge thereby improving communication and transferring information. Similarly, some educational theorists support the idea of converting tacit knowledge into explicit knowledge – that which is readily accessible and identifiable - as it contributes to new understandings otherwise unattainable by “outsiders” of that community of practice (York & Marsick, in Mezirow, 1990).

As Corburn (2005) asserts, “[when] the accounts, stories, tests and practices [of] local knowledge. . . understood as scripts, images, narratives and understandings used to make sense of the world, are used in combination with the insights, tools and techniques of disciplinary sciences” (p. 12), improvements to knowledge utilization occur. Of salience for this study, is that through the collaboration of multiple knowledges, the process of knowledge utilization is made accountable to, and appreciative of, different epistemological orientations and therefore

differences in worldviews, with enhanced potential for inclusivity of the less putative knowledge claims. Multiple knowledges are investigated for their effect on transformative learning.

Summary of Literature Review

In conclusion, with anticipated growth of interest in local food contributing to rural economies and environmental sustainability, knowledge of how this interest is created, used, and promulgated is historically and socially significant. My interest in exploring differentiating forms of knowledge (e.g., academic, local, and tacit knowledges) stems from a Habermasian orientation that associates knowledge creation with instrumental, communicative, and transformative learning. Learning is generated from a human interest associated with a perspective meaning or frame of reference that has epistemic, sociolinguistic, and psychological factors either extending or inhibiting a frame from change. The literature consulted in this review suggests that knowledge is constituted from a combination of divergent and relational aspects of meaning-making, and that it is in this collaboration where the potential for personal and collective change exist.

In an effort to understand how study participants approach localizing food as an interest, and how participants perceive themselves to be engaged in some aspect of transformation, I aim to apply the literature on knowledge and transformative learning to this study. While the literature provides relevant theoretical and orienting frames for interpreting the findings, I remain connected to “what academic work will look like as it begins to juxtapose the discursive resources of different social formations, and how the reach of counter knowledges gets extended and by whom” as an important imperative for the study (Lather, 2006, p. 42). In other words, I am deeply interested in what research participants will contribute to this topic.

CHAPTER THREE

RESEARCH METHODOLOGY

In the context of existing bodies of knowledge as outlined in the previous chapter, this study investigates processes of knowledge creation and utilization in order to better understand the personal and collective transformation associated with the local food movement in the rural Saskatchewan community of Craik. A methodology of critical ethnography was chosen for this qualitative study due to its applied action orientation, as well as its critical lens and the fit with a focus on personal and collective transformation and knowledge creation. The following sections describe the study's methodological orientation, research setting and participants, methods of data collection and analysis, orientation to validity, and associated ethical issues. To begin the chapter, however, I contextualize myself in the research.

Researcher's Background

I am, and for as long as I remember have been, keenly interested in food. I grew up in the Canadian prairies, as a Euro-Canadian "farm girl" in rural Saskatchewan - the youngest of three sisters born to working-class parents. My childhood and youth was surrounded by an unequivocal connection to food production: my father, of Scandinavian-Canadian roots, was a grain farmer, and my mother, of Ukrainian ancestry and with a farming background, was a connoisseur of gardening, preserving, and cooking. I learned from a young age what was involved in growing and creating good food and have been fascinated by it ever since, involving

myself in urban community garden projects and collective kitchens, becoming a “wwoofer” (willing worker on an organic farm), and feeding my own family as healthfully as possible.

In my youth I was active in community, school, and provincial groups such as the local 4-H club, the Saskatchewan Cooperative Youth Program, Ukrainian dance groups, and student politics/leadership. Like other members of my family who participated in local Wheat Pool and “Co-op” boards, the National Farmers Union, volunteer organizations, and political groups, I was accustomed to lively suppertime debates and discussions. My two older sisters, then attending university in Saskatoon, frequently brought people “from the city” to our farm, exposing me to new ideas and a strata of political ideologies. I believe those early experiences were foundational in sparking my interest in social justice issues.

In my late teens I moved away from Saskatchewan to acquire an undergraduate degree in Women’s Studies at Mount Saint Vincent University in Halifax and while there, became politically active in Latin America and Mi’kmaq solidarity work, while frequently volunteering with women’s groups, environmental groups, and anti-poverty coalitions. My sense of politicization was enhanced by two significant events in my early twenties: the bittersweet exchanges I had with federally sentenced women while working for the Elizabeth Fry Society at Kingston’s notorious Prison for Women (P4W) and a two month excursion to Nicaragua to volunteer and visit my sister living there. These events exposed me to the richness of human spirit, despite the perplexities and devastation that poverty imposes.

In the mid 1990’s I met my soul mate and partner Bob – a teacher, environmental educator, and basket weaver. In 1997 we became parents to our first child, Nadja, and have subsequently had two more daughters, Yolanda and Carmin. As I became more attuned to the enormous responsibilities attached to our children’s spiritual, physical, mental, and emotional

growth, I began to pay more attention to my own (and other people's) practices and attitudes regarding the environment. When we moved to Saskatchewan from Nova Scotia, I assumed the role of director at an environmental NGO. This position afforded me ample opportunity to engage in and learn about local, regional, and global environmental issues. Environmental issues associated with food, agricultural policy, and education, seemed particularly interesting to me, perhaps due to my personal history and a social desire to see more equitable and healthier food supply systems. I chose to re-acquaint myself with university and began graduate studies with these issues in mind.

Ideologically, I operate within a loosely-defined social constructivist paradigm that recognizes that various ways and means of knowing exist, and are both influenced and defined by socio-cultural factors (Hanson, 2007). Social constructivists see the connection between theory and action and use this understanding in their studies to interpret meaning-making that builds towards social change. I also consider myself a feminist and I am grounded in Unitarian Universalism as a faith which recognizes the importance of cultural and spiritual diversity, ecological and social justice, and dialogue. It is thus, from this epistemological standpoint, that I approach my participants and the study generally, and acknowledge that my personal history and worldviews will influence the interpretations I make, given the understanding that knowledge itself is never neutral nor complete. (Denzin & Lincoln, 2003; 2008; Schutz, Chambless & DeCuir, in deMarrais & Lappin, 2004).

Methodology

The methodological approach chosen for this study is critical ethnography. In many versions it is compatible with a view of knowledge as socially constructed and situated (Guba, as cited in Carspecken, 1996). I am particularly drawn to the reflexive and social nature of critical

ethnography, which compliments my theoretical framing of knowledge creation and utilization as collaborative processes with potential for both personal and collective transformation. Critical ethnography attends not only to techniques for data analysis, but the “deeper implications of the practice, such as the reflexive researcher’s subjectivity (agency), fluid spatiality (location) and comparative historicity (time)” (Chang, 2005, p.183).

Critical ethnography engages research and writing that directly relate to the critical social issues of our time, where the “ethical framework presumes that the public sphere consists of a mosaic of communities with a pluralism of identities and worldviews” (Tedlock, 2008, p. 161). The strength of critical ethnography is its capacity to identify cultural patterns that provide reason and meaningfulness to human values and behaviours (Denzin & Lincoln, 2003). For critical ethnographers such as Carspecken (as cited in Kincheloe & McLaren, 2007)

[T]he conception of culture . . . [is] a complex circuit of production that includes myriad dialectically reinitiating and mutually informing sets of activities such as routines, rituals, action conditions, systems of intelligibility and meaning-making, conventions of interpretations, systems relations and conditions both external and internal to the social actor. (p. 329)

Thus, when I write about participants’ orientations to local food I am conceptualizing this as a “culture” or complex web of social and meaning-making factors. Using critical ethnography as the study’s methodological orientation allows me to investigate “knowledge [as] internal to the practice, praxis, and action” of local food culture in rural Saskatchewan (Carspecken, 2005, p. 18). In this regard, critical ethnography is an *applied* methodology, bearing relevancy for local contexts and the actions and knowledge that stem from them. Because the local food movement is rooted in place, local culture, and values, and has potential for personal and collective

transformation, critical ethnography is an appropriate approach for this investigation and one that allows me the ability to investigate transformation as an action of learning and creating knowledge.

Site and Participant Selection

Recognized as a progressive community in the agricultural belt in rural Saskatchewan the town of Craik and its adjoining municipality was selected as the research site due to the area's bold initiatives in environmental sustainability and rural revitalization. In 2001, the town of Craik embarked on short and long-term projects and educational activities related to environmental sustainability through their Craik Sustainable Living Project (CSLP). The CSLP includes a prominent eco-centre that hosts many activities, meetings and, workshops and as part of its five year plan, the CSLP implemented a strategy to establish an eco-village situated within town limits where new homes were required to utilize sustainable energy technologies and "green" building materials. CSLP was also successful in receiving an Eco-Action Community Fund grant from Environment Canada to host educational activities on food production in April 2008.

My proposed research design envisaged the Saskatchewan Organic Directorate's (SOD) Food Miles Campaign (FMC) to be an instrumental tool in connecting my research to members of the community interested in local food. However, timing became an issue; by the time my proposal and ethics were approved, FMC's work in Craik was nearing completion and they were onto other tasks (namely, writing up reports, making presentations at conferences, and finishing their website). FMC's coordinator and board were helpful in identifying some participants and encouraging my work in Craik despite their lack of ongoing initiatives there, but the campaign was less involved than originally conceived. While the FMC became less resourceful for this

study, CSLP's Health Committee was quickly identified as a group with a vested long-term interest and vision in relation to the local food movement in Craik. Members of the health committee organized a local food challenge and workshops on gardening, composting, and greenhouse development. They also collaborated with the health region on areas of community and school nutrition education. Some members of CSLP's health committee were interested in participating in my study and self-identified at a local environmental film festival. Detailed information on the study objectives was later sent to these individuals with a formal letter of invitation to participate.

Study Participants

The goal of the study was not to survey a large sample of the population, but rather “to work with a small group of people in depth as participants in the research, because they are knowledgeable, interested, [and] motivated” (Zuber-Skerritt & Fletcher, 2007, p. 423). Providing in-depth detail from a small sample offers an opportunity to gather rich description from the participants about the role knowledge creation and utilization has in their lives.

Upon request for a participant sampling, I established a short list of criteria required for their involvement. The criteria are as follows, with participants needing to: (a) be citizens living in the designated study area; (b) be at least somewhat familiar with the term *local food*; (c) have an interest in producing, preparing, and/or consuming local food; and (d) be willing to discuss the qualities necessary for enacting transformative changes in embracing a culture of local food. I had little trouble finding participants. From the film festival, promoted by the FMC and sponsored in part by the CSLP, I received ten names of individuals interested in participating in my research. As well, the FMC's coordinator promoted my research in conversation with many of the participants. Once I received ethics approval, I contacted these individuals through a

formal letter of invitation (see Appendix A) and asked individuals to contact me should they wish to voluntarily participate or to get more information on the study. Within a week, I had heard from six individuals living in the Craik area and these became my research participants.

Data Collection

Beginning in October 2008 and continuing for a period of five months, data were collected for this study using the following qualitative research methods: semi-structured, face to face interviews; a focus group meeting; and observation. Interviews and observation occurred in October and November 2008 and a focus group meeting occurred in Craik in March 2009.

Observation

The method of participant observation has been described as “the fundamental base of all research methods in the social and behavioural sciences” (Adler & Adler, 2003, p. 107), and “as the mainstay of the ethnographic enterprise” (Werner & Schoepfle, as cited in Denzin & Lincoln, 2003, p. 107). Carspecken (1996) refers to observation as the “data anchor” supporting the work of interviews, focus group discussions, and data analysis in critical ethnographic studies.

In practical terms, I kept a field note journal of my perceptions and observations throughout the data collection period. I attempted to document my own reactions to events as they unfolded in interviews and in the focus group, in combination with nuances – that is, silences, glances, and reactions I noticed while sitting at the local coffee shop or Co-op in the company of non-participants. I was curious about the patterns of interaction, roles people assumed, and how power relations were structured in the community and among participants. Carspecken (1996) encourages researchers to observe and develop an analysis of these interactions in order to aid in mapping the roles, patterns of behavior, and relationships

participants have to one another and to their environment. Although I was uncomfortable writing in my journal while still inside community locations, I would write interpretations as soon as I returned to my vehicle or after I returned home.

For analytical purposes I attempted an ethical approach to observation that allowed for “human action [to be] interpreted in situational contexts, and not in terms of objective *codes*” (Angrosino & Mays de Perez, 2003, p. 139). My interpretations as an observer of participant interactions and physical surroundings were recorded in my field note journal in descriptive ways and sometimes with my subjective position as researcher written into them.

Individual Interviews

The individual interviews were face-to-face and semi-structured (see Appendix B for interview guide). Semi-structured interviews - in which a list of questions are used as guidelines with expansion of questioning permitted as useful – are reflexive in nature and allow for fluidity of topical conversation. By allowing participants to follow up and expand on questions as they wish, the research is also democratized and to some extent “given over” to the participants for their input (Carspecken, 1996). One semi-structured interview was conducted with each research participant, and in one case, with two participants at the same time. Interviews varied in length from one to two hours. Because I wished to ensure participants felt safety and trust in the interview environment, I asked people where they wished to meet. Five of the six interviewees wished to meet in their home; and one interviewee wished to meet at Craik’s eco-centre restaurant. All interviews were audio-taped and transcribed verbatim, with transcripts sent back to the interviewees for member-checking, with the option to add, delete, or alter their statements if they wished to.

Meetings with each participant varied. Some people spent time showing me their home or yard, pointing out small details, talking about their interests, and establishing a sense of relationship with me. This “pre-interview” time gave me an opportunity to adjust my questioning to elicit a more in-depth response. With other participants, it was clear that the interview had imposed time restrictions as they were busy with children and other responsibilities. With each interview, I tried to respond effectively to their needs for contact, upholding personal responsibilities, and trust by picking up on physical gestures and verbal queues.

At each interview, I began by presenting the consent forms and explaining the study’s purpose. I then handed participants a “demographics” questionnaire to fill out, in an attempt to cover general questions pertaining to their age, education, living arrangements, local food consumption patterns, and occupations. Because interviews were semi-structured, the order of questions, prompts, and flow of conversation varied. I had a number of guiding questions regarding participants’ backgrounds, knowledge, experiences, and opinions on the developing local food culture and used this guide to ensure that the research questions were being addressed in some respect. Through prompts I attempted to explore how knowledge creation and use played into their understanding of local food and how, or if, this issue has been personally transformative (and whether they believed such transformation would foster collective transformation). While the interviews flowed much like a conversation, the guiding questions provided a reference as needed.

Focus Group

Akin to the constructivist paradigm I ascribe to, Kleiber (2004) notes, “focus groups are most useful when employed with the assumption that knowledge is socially constructed and where the reality of interest is the result of social interaction” (in deMarrais & Lapin, 1998, p.

89). A focus group was chosen for use in this study to better understand the development of knowledge as socially constructed and to explore how dialogue is used in processes of knowledge utilization.

I chose to organize and facilitate one focus group meeting with all interview participants once the interviews were completed, transcribed, and coded for common (or uncommon) themes of interpretation and meaning. Early in March 2009, five of the six interview participants met for a semi-structured focus group at the Craik eco-centre for two and half hours of dialogue. Due to an unforeseen family funeral, one interviewee was unable to attend the focus group.

With Craik being a small town, participants were familiar with one another and had historical connections. Comfort and trust was promoted at the focus group by offering coffee, lunch, and “pre” focus group conversation. Confidentiality was discussed at the outset of the meeting and consent forms were distributed. The focus group was audio-taped and sporadic notes were made throughout the meeting.

The focus group operated on the premise that dialogue would be reflexive and responsive to participants’ needs, although use of guiding questions would be used to keep the dialogue “on track.” Prompts were used to promote dialogue among participants, thereby creating opportunity for understanding of the potential for engaging participants in knowledge creation and utilization towards transformation as determined for the study (see Appendix C).

Data Analysis

Analysis for this research has been ongoing since its original inception, and where the “design unfold[ed] as the fieldwork unfold[ed]” (Patton 1990, as cited in Noblit, Flores and Morillo, 2004, p. 157). Some themes, such as those associated with agricultural paradigms, were deductively derived from reading literature on similar contexts or groups of individuals focused

on a local food economy and food system. Other subthemes inductively emerged as the research progressed or transcriptions were read over and tapes listened to again. I transcribed verbatim over one hundred and thirty pages of text from the interviews and focus group. I listened not only for the literal responses to questions and prompts, but the silences and intonations in which answers were given. The interviews were more personal and reflective than the focus group, which seemed to focus more broadly on “the movement” of local food within the context and culture of Craik.

The themes derived from conversations and my interpretation of their meanings in relation to the larger study purposes are organized and categorized in a temporal sequencing of knowledge creation from childhood to adulthood. These sections detail meaning-making influences in the creation and use of knowledge towards transformative learning and are given the food-related term “ingredient.” Two forms of ingredients - the contributing ingredients and the inhibiting ingredients – characterize the sections on childhood learning, adult learning and knowledge utilization and factors of resistance that collectively relate to participants’ opportunities for knowledge creation and transformative learning. The metaphor *ingredient* aims to highlight parallels, contradictions, and intersections in relation to the topics of knowledge creation and utilization as drawn from the participant narratives in creative and context-specific ways.

Analogous to knowledge mapping, the blend of ingredients in the findings explicate the diversity of factors as knowledge pertaining local food was developed and used within the context of transformative learning. Knowledge maps are “quest[s] to help discover the constraints, assumptions, location, ownership, value and use of knowledge artifacts, people and their expertise, blocks to knowledge creation, and opportunities to leverage existing knowledge”

(Grey, 2008, accessed April 23, 2008). Due to the importance of agriculture and food in this research, I wanted to appropriately define intersections of the research's foci – namely, knowledge utilization, creation, and transformative learning – within a suitable metaphor. As Capra (1989) suggests, “Metaphor is the language of nature. Metaphor expresses structural similarity, or better still, similarity of organization. . . the pattern which connects.” (p. 81)

The data analysis process also enables examination of my own theoretical orientations and assumptions, interactively shaped by my “own personal history, biography, gender, social class, race and ethnicity, and by those of the people in the setting” (Denzin and Lincoln, 2008, p. 8). Discussion of the findings generally follows an analytic reporting process with some reflexive reporting to share my personal voice in the research.

Limitations

Without hesitation, the foremost limitation within this study has been the abbreviated length of time to engage ethnographic methods to explore knowledge creation/utilization/transference and personal, and social transformation as life-altering and paradigm shifting processes. Due to my personal circumstances I was only able to visit the research site four times over a five month period. Nonetheless, I felt it important to designate a rural area in this research, in order to explore how the local food as an emergent discourse is unfolding at this current moment in history, *within* an agriculturally-based community in Saskatchewan.

Validity

In critical ethnography, research validity entails measuring the worth of research by the change(s) it contributes to (Lather, 1991). Referring to “catalytic validity” Lathers (1991)

suggests validity “represents the degree to which the research process re-orient, focuses, and energizes participants towards knowing reality in order to transform it” (p. 68). In this study, efforts were made to actively listen to participants, record their stories as told, take accurate and timely notes of observations, and seek feedback from colleagues and my committee. As well, to ensure the participants’ perspectives are properly addressed and recorded in the research, I used a process called “member checking” whereby research participants had the opportunity to review personal statements made in the research for accuracy and completeness. Transcriptions of personal interviews were sent to participants for comment, however none of the participants contacted me afterwards for clarification or alteration.

As a means of sustaining the research, I encouraged participants to continue meeting after the focus group discussion to pursue further local food discussions in the Craik area if they wished to do so. Funding was offered by the Knowledge Impact in Society (KIS) initiative should participants wish to carry on the dialogue on localizing food. The coordination for further local food events would be the responsibility of the participants, but it was seen as a way for KIS to support ongoing discussions on agriculture, rural community needs, and of course, local food, in the area.

Ethical Considerations

This study follows the procedures and guidelines for ethical approval outlined by the Behavioural Research Ethics Board of the University of Saskatchewan, which makes use of the standards of the Tri-Council Policy on Ethical Conduct. The research was minimal risk to the participants. To ensure ethical conduct during the research, letters of consent including descriptions of the research process and purpose, risks and benefits of the research, right to withdrawal from the study, and methods for storing and using the data gathered were provided to

the participants (see Appendix D). Pseudonyms are used in the thesis text, in order to protect the participants' anonymity in the research.

Summary of Methodology

The critical ethnography approach employed in this study acts as a means of inferring where the parallels and intersections exist as divergent sources of knowledge collaborate within the context of the local food movement. Through an interpretive lens that uses sections of childhood and adult learning to represent participants' epistemological framings and orientations to the research topic, I decipher what ingredients seem imperative to their processes and applications of knowledge creation and utilization. Further ingredients are interpreted to suggest that both contributing and inhibiting elements affected the opportunities and actualities for transformative learning to occur. The next chapter aims to present and blend the ingredients effecting knowledge, meaning-making, and transformative learning in the context of localizing food in Craik.

CHAPTER FOUR

FINDINGS: CONTRIBUTING AND INHIBITING INGREDIENTS IN KNOWLEDGE AND TRANSFORMATIVE LEARNING

The concept of knowledge is one of plurality; knowledge(s) have multiple identities with distinct foundations in biology, history, cognition, and cultural meaning. Knowledge is created by processes of learning and understood as the “scripts, images, narratives, and understandings we use to make sense of the world in which we live [that] combine with insights, tools, and techniques” to foster living (Corburn, 2005, p. 12). In this chapter I detail my interpretations of participants’ stories on knowledge creation in their lives pertaining to local food; knowledge that is socially-constructed, experientially and historically- derived, and geographically embedded. Further to these interpretations, I illuminate the ways in which knowledge is applied in the acts of consciousness and transformative learning in localizing food in Craik, and the factors that surfaced as participants began to assert their consciousness in relation to local food.

Study participants indicated selective claims to knowledge that may be termed and deciphered taxonomically: local or lay knowledge, tacit knowledge, popular knowledge, and scientific (academic) knowledge. Additionally, demonstrations of Habermasian domains for learning – communicative, instrumental, and transformative (emancipatory) – were aptly noted from the stories participants shared. Using a similar categorical format that Birchall (2006) describes in his book on popular knowledge, Table 1 offers a schematic approach to the ways

particular knowledge claims are configured based on my inductively-developed summary of the participants’ accounts of their learning (see page 38).

Table 1: Knowledge Claims

Form of knowledge	Site of production	Means of Legitimation
Local Knowledge	Tradition, culture, place-specific. Produced from time-honoured experiences, oral story-telling, passed onto subsequent generations.	Repetition of experience. Knowledge is valued based on place and culture. Environmentally and agriculturally useful.
Tacit knowledge	Communities of practice (organization, industry, family, groupings of like-minded), understanding intuitively generated via means of apprenticeship, imitation, observation.	Insider knowledge. Know-how knowledge without codes of language with which to convey meaning.
Popular knowledge	Unregulated and diverse sites of production (i.e. Internet). Associated with praise for iconic figures and events.	Legitimacy rests on the frequency of attention to knowledge source (i.e. hits per website) and outside sanctioning from academic knowledge.
Scientific (academic) knowledge	Academic setting (university, lab), industry. Produced by repetition and codes of accepted meaning.	“Rigorous” findings belong to the distinct rules of the discipline or industry. Tacit awareness of the insider codes for conduct and knowledge generation.

Applying a food-related term, the three distinct sections of this chapter consist of multiple “ingredients.” The first two sections on childhood and adult learning designate *contributing*

ingredients to knowledge creation and utilization, and ultimately transformation, while the last section details *inhibiting ingredients* that posed as obstructions to participants' transformative learning processes. Knowledges, when co-existent and complimentary to one another, were shown to be effective in transformative learning and creating interests in local food. Participants shared how they utilized their knowledge of food production processes to endorse local food's benefits nutritionally, economically, socially, and ecologically for their community. Yet, despite their examples of knowledge utilization surrounding local food's advantages over imported food, participants encountered resistance from some community members. This show of hegemonic force proved to inhibit transformative learning processes and participants' desires for social and personal change. The third section, "Ingredients of Resistance: Dominant Ideology, Power, and Uncertainty" explores the stories of community resistance to local food. All three sections emerged from the data collected and were re-worked and re-designed numerous times for clarity and robustness.

The contributing ingredients of all sections consist of both metaphoric and material elements that participants valued: experiences, emotion, community, family, academia, place-specific details, peers, cultural dynamics, gender, and other meaning-making orientations that contributed to knowledge creation and knowledge utilization processes. Inhibiting ingredients include: dominant agricultural paradigms that participants struggled over, community resistance and power dynamics, and the economic and environmental uncertainties with food system changes. To draw attention to the ingredients they are placed in italicized subtitles throughout the chapter. Knowledge creation towards local food is an intersecting and overlapping process formed within and extended from childhood through to experiences of learning in adulthood. As a result, many ingredients noted in one particular section inevitably overlap at different stages in

the participants' lives. For example, the ingredients of cultural values may be realized in both childhood and adulthood, or the importance of community and individual relationships may be transposed to learning outcomes.

To exemplify how the many ingredients influenced participants' knowledge creation and utilization I include selective quotations from participants and from my journal. Quotations are predominantly sourced from the participant interviews, except in references where my journal notes are referred to or where "FG" is written, indicating the focus group discussion. In what follows, I first begin by summarizing several types of knowledge and associated learning domains (as per Table 1) as filtered from the interviews and focus group discussion. Following this, I introduce the research participants and then offer a brief overview of how local food was defined by the participants. I then move into an analysis framed by the three identified sections (childhood knowledge creation; adult knowledge creation and utilization; and, barriers to transformation), identifying the key ingredients I associate with each.

Indications of Claims to Knowledge and Learning Domains

Local Knowledge

By definition, local knowledge "does not owe its origin, testing, degree of verification, truth, status, or currency to distinctive professional techniques, but rather to common sense, causal empiricism, or thoughtful speculation and analysis [and is rooted in particular local contexts or settings]" (Lindblom & Cohen, as cited in Corburn, 2005, p. 47). Sometimes referred to as lay or traditional knowledge,⁴ local knowledge "experts" make decisions and pass on

⁴ A number of authors (Desmaris, 2007; Fonte, 2008; Kerans & Kearney, 2006; Kuyek, 2007; Nazarea-Sandoval, 1995, among others) assert that lay knowledge, regarded in some cases as "traditional knowledge," risks appropriation by industrial agri-food interests that place profit above public or sovereign rights and surrounds issues such as seed saving or local valourized foods. Regrettably, in some cases of certification/standardization of local

knowledge based on evidence gathered from time-honoured traditions, intuition, oral narratives, and experiences.

Local experts in Craik were predominantly people whose lives were, or had been, enmeshed in producing or processing food and therefore had particular local knowledge of soil and topography, growth and weather patterns, and so on, that developed over time, experience, and life circumstances. When local knowledge is shared, both instrumental and communicative learning are simultaneously engaged. Learners develop technical skill (instrumental learning) while being communicated to within particular knowledge frameworks associated with history, hermeneutics, and cultural value (communicative learning).

Tacit Knowledge

Tacit knowledge was interpreted through the data gathering to have been gained largely through experiences of doing and tacitly learning the “right” way as it might correspond with the growing season, soil matter, weather, feel, taste, and smell. Tacit knowledge, as interpreted and understood by subsequent generations, is conveyed by means of participant observation, imitation, apprenticing, and experience. As an intuitive understanding towards knowledge acquisition, tacit awareness is like the hidden transcripts (Scott, 1990) of community members, where outsiders are excluded from knowing the skill or event at hand. While local and tacit knowledge have some similar traits and purpose, their orientations are distinct. Local knowledge is intimately associated with explicit, communicative learning, while tacit knowledge is implicitly derived.

products, “local experts” have been consulted only to have their knowledge turned into corporate intellectual property (Fonte, 2008).

Academic Knowledge

Academic knowledge has long been regarded as the dominant or “legitimated” (Foucault, 1980) claim to truth. Academic knowledge describes techno-rational ways of knowing and is shared through “experts” well-versed in its claims, or indicated through texts (books, journals). Some participants shared the importance academic knowledge had on their adult learning through experiences of their own university education or in conversations with representatives from the university where knowledge was transferred.

Popular Knowledge

Popular knowledge is culture-specific and regarded as knowledge only by people accustomed to its symbols, texts, and iconic makers. As Birchall (2006) attests:

[The talk shows] are popular, not only because many of them are populist in nature, but also because they represent attractive ways of knowing that are open to a wide range of people. . . . [They] do not require formal training (indeed, we may enjoy popular knowledges precisely because we already feel well versed or “trained” merely by exposure to particular cultural forms and texts) and form a common part of our popular landscape and currency. (p. 21)

A contingent of participants voiced recognition of the ways popular knowledge influenced them in regard to local food thus indicating popular knowledge’s role in adult learning and knowledge creation.

Communicative Learning

Communicative learning was strongly indicated in the stories and recollections of daily life through experiences of peer and collective learning, church member interactions, knowledge

sharing in family life, community events, and shared cultural learning. According to Habermas (1972), communicative learning links the “language games [of] symbols, actions, and expressions . . . establish[ing] schemata of world interpretation and interaction” (p. 192). For participants, the process of sharing knowledge builds collectively acceptable meanings and ways of proceeding with their new knowledge, but only so far as these fall within already-accepted symbolic systems. For Mezirow, communicative learning accepts changes in meaning schemes – changes in specific attitudes, emotional responses, or beliefs – as they are part of everyday living and adult learning.

Transformative Learning

Transformative learning is engaged when a learner begins the process of critically reflecting on their personal perspective meaning system, challenging perspective in three domains: epistemic, sociolinguistic, and psychological. Essential to transformative learning is the process of taking action based on a learner’s new insights from reflection. Participants’ stories of cross-cultural learning and learning that refutes conventional beliefs and practices are examples of transformative learning. When transformative learning is engaged into new practices, new knowledge is accrued.

Instrumental Learning

Instrumental or techno-rational learning frames learning in cause-effect or improvement of skill. Instrumental learning is propelled by a cognitive interest in controlling one’s surroundings and transmitted by formal sets of language or codes. Agriculture and food production generally, require refined technical skill in order to fulfill a material goal of food provision. Many of the participants’ stories detail their developments in instrumental learning.

Participant Descriptions

Of the six study participants, two were farmers living outside of Craik, and four participants lived within the town limits. The ages of the participants ranged from their early thirties to early sixties. Everyone was asked about their educational background and current occupation, with responses ranging from university to the “school of hard knocks.” Occupations included farming, ranching, mother, town administrator, and retired teacher. All but one of the participants identified as volunteers with organizations that included CSLP, local churches, recreation boards, schools, the local Co-op, the legion, the library, and the town hall. Only one participant was a member of an agri-food organization.

Recognizing some personal qualities and characteristics of the participants may help readers to locate the participants’ voices in the findings, and thus the following paragraphs give a snapshot into their lives. Using pseudonyms, I provide a short description of the study participants, focusing specifically on their interests in local food as determined by the demographic face sheets provided to participants at the beginning of each interview, as well as my own observations. Following these paragraphs, I offer a brief description of how participants defined “local food.”

Now in their mid-50’s, George and Carol live on a mixed farm raising beef cattle and growing grain crops (e.g., barley and wheat). Despite Carol’s university training in visual art, the couple identified themselves as family farmers and have dedicated years to rearing their four, now mostly adult, children. They now care for an elderly uncle in their home. As is often necessary to keep the farm from insolvency, off-farm work was sought to provide supplemental income. The division of work seemed traditionally gender-specified in their home. Carol tended to the “unpaid” work of child-rearing, kitchen, and garden work and farm support. George at

times worked off the farm at auctions or selling real estate but identified himself as “the farmer” when asked what his vocation was. As of late, George and Carol see their farm and lives shifting. They have recently become involved in selling bread at two farmer’s markets and are developing an economic plan for a new business in a nearby community that will support the goods coming off their and other farms in the area. They are drawn to the concept of local food by various knowledge sources and see processes of localizing their efforts as a means by which they may be able to attain greater economic stability in their lives.

Nel is a woman in her early 60’s. She lives in Craik and grows ninety per cent of her own produce for consumption. Nel’s childhood and youth was spent growing up in British Columbia, but she would often spend summers visiting her maternal grandmother who lived in rural Saskatchewan. She moved to Craik after marriage. In the late 1970’s, Nel and her husband travelled and worked in Africa for four years with their children, and she refers to this experience as “life-altering.” She and her family returned to Craik with a new lens for interpreting the world and an interest in how they might make a greater impression on it. Nel became involved in local politics and was one of the original founders of the CSLP, remaining committed to the project to this day.

Charlotte and Peter are “retired” teachers, but stay active in the community as volunteers and through assisting their (step) children and aging parents. Charlotte has remained on the elementary school’s substitute teacher list and infinitely perceives herself as a teacher at heart. Not originally from Craik, both Charlotte and Peter grew up as farm kids in Saskatchewan during the 1950’s and have a strong attachment to the values rural life instilled in them. They are avid “walk-for-life” enthusiasts and find fulfillment in their relationships to grandchildren, and to health and environmental causes.

Tammy defines herself as a mother of two young children and as an ecological activist. Growing up in a city, she admits that life in one of Craik's new eco-village homes has been a challenge. She contends that her family's interest and attention is "to do what we can for the environment" by living "off-grid," with a composting toilet and large garden plots, and returning parts of their land back to native prairie. Tammy is a volunteer with the CSLP and was one of the organizers of Craik's Local Food Challenge. Tammy has a university background in biology and is married.

Defining Local Food

Frequently, participants expressed their understanding of and concerns with current agri-food systems, practices which compelled them to discover and put forward alternatives. As an alternative concept in procuring and producing food, a localized food network was understood to offer relief to participants' frustrations with current food production and distribution systems. However, local food as a term was defined broadly among participants. Definitions varied from food produced and sold within a twenty mile radius to food which was strictly and proudly pan-Canadian. Given this expanse of definitions, participants varied in their articulations of how knowledge on local food had accumulated and how the politics of localization - that so many local food advocates propose - might have actualized itself in a collective transformation. The following text describes the processes and paradoxes in knowledge creation and transformative learning as interpreted from the findings. The first section explores the ingredients associated with childhood learning and selective knowledges deriving from that learning.

Ingredients towards Knowledge and Learning in Childhood

The term “provenance” is used in studies of gastronomy to foster the understanding that food has important cultural, historical, and geographic trajectories and significance (Atkins & Bowler, 2001; Petrini, 2007). Akin to this analogy, epistemological developments for participants in relation to the topic of food stemmed from their place-specific exposure to values exemplified by ethnicity, geography, history, and biology. Their knowledge and interests in food and food production originated with their broader epistemological frameworks for understanding and valuing. Knowledge acquired in childhood typically fuelled an ethic and appreciation for food and its production, which will be further discussed throughout this section.

To illustrate how participants’ memories of childhood connections with food and food production grounded their knowledge toward and interests in localizing food, I suggest that a number of main “ingredients” participated in this formation, including: i) home life and family relations; ii) cultural, material, and emotional attachments to food and food production; iii) gender identity and role modeling; and, iv) community connections on knowing. The overarching forms of knowledge with which these ingredients intersect and overlap with are local knowledge and tacit knowledge, as described earlier.

Local knowledge acquired in childhood was indicated in participants’ memories of the learning attached to family or community members and taught via explicit communication. As per Table 1, local knowledge was embedded in the participants’ original culture as a means of “carrying on” traditions that included ethnic food associations as well as views on nature, gender roles, and family obligations. Tacit knowledge was acquired by means of observation and imitation rather than explicitly communicated and included more subtle learning in production methodologies and place-specific characteristics necessary to agriculture and gardening (e.g. soil

consistency, or feel and look of food during processing). To begin this section, I offer a brief description of memory and its significance to the participants' valuing of, and knowledge on, local food.

Memory and Learning

In transformative learning theory (TLT), remembering is associated with one's emotional attachments to, and cognitive perceptions of, previous events or objects. Mezirow (1991) suggests, "Memory is an imaginative reconstruction of our past reactions or experiences plus a limited amount of detail that appears to us in the form of words or images" (p. 29). How one remembers is related to the strength of emotion involved and the cognitive integration of the initial learning. Remembering is central to learning processes as we build upon previous interpretations of events or relationships, forming new judgments, analyses, or conceptions.

Where participants' memories of earlier times were often recalled with a fondness and sense of nostalgia, I came to interpret these individualized memories as selective and context-specific, confirming earlier suggestions from Chapter Two that knowledge is always partial or incomplete. Nonetheless, participants' memories revealed the ways food values were embodied through: food's connection to the natural environment from which it derives, its capacity to provide nutritive value, and the social dynamics represented when food is shared or produced. The following sections outline how memories of food were interpreted through the participants' stories in addition to local and tacit knowledge claims manifested throughout the data.

Ingredient: Home Life and Family Relations

Memories of home life and family relations were significantly emphasized in most interviews and within the focus group. The stories shared were often nostalgic accounts of

“growing up” as farm kids in the post-war era of the 1950’s or about the work involved in growing food with and for their families. As children, five of the six participants were actively engaged in gardening or farming or both.

Because agriculture and food production is partly based on disseminating technical skills from local experts, the accumulated knowledge of the past, “where people were pretty much self-sufficient” (Peter, 2008), had significant impact on the lives of four of the participants. Study participants spoke about the necessity of acquiring knowledge on technical skills for events such as “picking Colorado potato beetles” (Peter 2008) or helping out during harvest times. Local experts had first-hand experiential knowledge that was tied to the land and time-honoured. Family members, particularly elders, imparted knowledge to younger family members: “My mother was from a farm and she always had a garden and I learned my knowledge from her gardening” (Nel, FG).

Food choices were limited to what was produced on-the-farm and less frequently from available selections in small grocery stores in the nearby towns. Participants with farm backgrounds spoke of their family’s involvement in year-round food provision and the infrastructures necessary to ensure infrequent food spoilage. Aside from gardening and agricultural production, food processing included “canning” tomatoes, fruits, berries, jams, and chicken, and curing meats for year-round consumption. Root cellar technology that utilized thermal mass energy was mentioned as a method of protecting sufficient quantities of food for the family’s consumption from freezing over harsh winters. As Peter describes:

It [root cellar] was away from the house maybe thirty or forty yards. . . There’d be a mound built over above, a thermal mass above, with a bit of a trap door and you’d go down a few stairs and you’d open another door and you’d go down into a root cellar. .

. [There were] bins of potatoes and beets, you know, root crops. . . and canned goods would go there. . . It was below the frost line. (Peter, 2008)

The knowledge necessary for creating and building a family's year-round foodshed was largely dependent on deploying local knowledge, through explicit means of communication. Due to the lack of availability and opportunity to buy store-bought foods family members were indebted to grasp the implications of living without this knowledge-for-survival. As a result, family members seemed collectively involved and engaged in learning about food systems and carrying on with traditions and local knowledge orientations. The next section explores the role of cultural connections to food in both a material and emotional sense, as frequented from the place of local or tacit knowledge.

Ingredient: Cultural, Material, and Emotional Connections to Food

Dual meaning was revealed in the material function and metaphoric forms food represented, ranging from daily obligations for sustenance to the communal symbol at celebrations. Likewise, local experts possessing local knowledge provided food at daily mealtimes and for symbolic purposes, thereby occupying clusters of knowledge. As a wide focus of local knowledge, food created a context for a deepened relationship to culture, personal relationships, and identity formation and was also the physical basis in nutrient value and healthfulness.

Participants spoke of their early connections with food consumption, emphasizing daily intake and cultural significance. One participant emphasized his emotional connection to food and the relationship food has to expressions of love. Tangibly and symbolically, food was the connection between most participants' personal ethno-cultural roots and the central focus to the

ways in which food was regarded in celebrations or at home in daily life. Charlotte (2008), whose roots were Anglo-Canadian, reflected:

I grew up on a farm and we grew most of our food that we ate and food was a very important part of our growing up. And now when you think back, it meant that at big family events, everything was related to food. Food was the centre-piece of all of our celebrations . . . every birthday, Christmas, New Year's, Easter, Thanksgiving, weddings or dances and the comfort thing - food.

Not surprisingly, rural women typically prepared and presented food at daily meal-times and celebration feasts. Some participants spoke of sharing food with neighbours or family, offering it as an expression of love, such as the giving of treats to children. One interviewee fondly remembers his mother's daily baking:

You know to this day, I can remember the things my mother used to bake for us and had ready for us when we came home from school. . . We'd come home from school in eager anticipation because everyday she'd have something – cookies or some sweet dough kind of thing. And you know they always say that smells are related to memory and right at this moment as I'm talking, I can smell those things. (Peter, 2008)

Participants' expressions of their emotional or visceral feelings were noted both in their recollections of childhood as well as current stories about their adult lives. As children, food consumption and production encompassed a spectrum of emotion that included comfort, affirmation, excitement, frustration, and boredom. When negative emotions were raised it was often in the context of repetitive labour in food production. Further data on the emotional aspects of food and food production will be discussed in the section on ingredients in adult learning.

Ingredient: Gender Identity Formation and Role Models

Gender roles, particularly the role of women, figured prominently in people's stories. People talked about the work of mothers in daily food provision and the knowledge derived from experiences such as gardening, cooking, or preparing family or community meals. What was considered "women's work" in an "era of men" (Charlotte, 2008) was consistently presented in narratives on hoeing, planting, weeding, watering, harvesting, cooking, preserving, drying, freezing, baking, and tending to farm animals' needs, year after year.

While the presence of men in the daily tasks of food growth and preparation have shifted in more recent times, historically gardening and kitchen duties were perceived to be "women's work," while men figured more prominently in the business and public side of agriculture. The following quote indicates the passage of traditional gender roles to subsequent generations:

As a child, my mother, even in Victoria, I can remember mom always having a garden. She always grew things. I remember having to pick potato bugs and shell peas and pick raspberries and strawberries and you know, do our share in the garden. But she always had a garden, always canned, always made jams and jellies and you know, even canned chickens. It was really the way I was brought up so there wasn't any other option. When I got married *we did the same*. (Nel, 2008, emphasis added)

Where women and men worked together was during large, labour and time-intensive tasks such as the slaughtering of animals. One participant recalls an experience in a chicken slaughter where, despite the communal nature, distinctive tasks were gender-specified:

A lot of things done in those early years were done communally. Butchering was always one – you gather a whole bunch of people together. I often think of the day that came to butcher the chickens. It was a terrible thing for kids – you watch your

dad chop the heads off those poor creatures! But in any case, it was kind of an assembly line. Dad would do the killing . . . and my mother would stick them in the scalding water and we'd pull the feathers off, then she'd draw them- she *always* had that job. (Peter, 2008, emphasis added)

These examples reveal that gender played a significant role in determining how and what knowledge was passed on to subsequent generations. Participants spoke of assuming local knowledge, explicitly communicated, from their parents or grandparents on gardening or food preparation. Tacit means of knowledge utilization were the unspoken rules of apprenticing with same gender role models or observed patterns for understanding. The next ingredient of childhood learning includes the role of community and social relations.

Ingredient: Community Connections to Learning

Most of the participants recalled the 1950's as a time when neighbourliness and cooperation was highly regarded. For one interviewee, George (2008), "It was just a great lifestyle. Like they say, it was made there, really. Everybody looked out for everybody and [there] was time to do what you needed to do, then time to enjoy it." Similarly to other participants who referred to the social nature of rural communities, George recalled that farm life was quantitatively more social in previous times simply due to a larger farm and rural population where people coalesced over both chores and social functions. George (2008) reflects:

There was a social life here then, and now I would say it's much diminished . . . It's changed and nobody can go back and change it back, but I think it's less. Somehow I think the emphasis is more on the dollar and less on the actual lifestyle. It's more a business than it was back then. Back then it was a lifestyle and yeah, neighbours

helped neighbours, but now neighbours help you but they still have to be compensated because to run a \$400,000 combine⁵ around for 10 hours is, you know, is just an awful expensive thing to do.

Interestingly, in each personal history of food production, participants recalled the social interactions with others – for example, parents, grandparents, or neighbours - as crucial factors in their own learning. When asked about where tacit or know-how knowledge on growing and preparing traditional⁶ foods exists today, one participant commented:

I think a lot of that knowledge has been replaced, but we're fortunate [in Saskatchewan] because I think there is still a generation left that has a fragment of that knowledge – the old ways of doing things. You'd be passing it on. Whether the knowledge that we all grew up with will be grandfathered out of existence I don't know. That's why the local food movement is so important – to bring back that knowledge, those skills - to make [growing your own food]. (Peter, FG 2009)

Regarding the historical connection to food and processes of its production, one participant aptly noted that “to be able to provide for yourself by growing [food] or sourcing your own food from local producers [brings a] connection with your roots that makes people feel good” (Nel, FG 2009). The desire to re-enact a tangible food network reminiscent of the past - where producer knew consumer and consumer knew their food's components - was expressed as

⁵ The price and size of farm machinery and implements has increased astronomically in recent times, in tandem to increases in farm size and output. As indicated from George's quote, the price of a new combine harvester on grain farms in Saskatchewan might range from \$400,000 to as high as \$850,000. Depending on the price of diesel fuel, fuel costs alone at the time of this study, ranged from \$300 to \$450 per day. In earlier times, harvest time was more a labour-intensive and social event. (information derived from grain farmer)

⁶ *Traditional* food in this sense refers to common, rural Saskatchewan fare that derived from a combination of European ancestry and Indigenous crops grown in local landscapes.

a cornerstone of the local food efforts in Craik. As part of the embedded knowledge rooted in the area, food and participants' meaning and identity deriving from it, was very evident within the interviews. As noted in the literature of Chapter Two and synonymous with the inquiry, knowledge is understood to be constituted via assumptions based on habits of mind and related points of view, and influenced by factors of epistemology, emotion, place, socialization, culture, and gender identity. In conclusion, the exploration of ingredients derived from childhood learning suggests that a number of experienced factors affected knowledge acquisition and participants' attention to food, fuelling a life-long interest in food's symbolic meaning in cultural contexts and the tactile or visceral feeling food production evoked. The next section explores the ingredients of adult learning and their further contributions to participants' transformative learning and local food interest.

Ingredients Towards Knowledge Creation and Utilization in Adulthood

The second major theme that surfaced within the research data is adult processes of knowledge creation and utilization in transformative learning. In conversations with participants, it was suggested that knowledge was utilized in social settings to promote ideas, exchanges of information, and foster relationships of trust and mentorship. As previously suggested, particular knowledge claims implied at one stage in life were indicated again at later stages. In the case of tacit knowledge, stories regarding adult learning scenarios suggested that participants gained knowledge by tacit means as in their examples on gardening. For most participants, knowledge creation in adult life was obtained through means of explicit communication, although many significant elements such as emotion, symbols, values, ideologies, and barriers affected the uptake of this knowledge.

As in the previous section on childhood knowledge acquisition ingredients contributing to learning domains and knowledge claims are indicated by selections chosen from participants' stories and my own observations and interpretations. The ingredients included in knowledge creation and utilization in adulthood include: i) trust, peers, and social relations; ii) cultural value placed on ecology and sustainability; iii) socio-ecological activism and events; iv) personal economy and health; and v) emotion, visceral feeling, and spirituality.

The first ingredient of this section explores the trust and mentorship necessary for adult learning and knowledge creation. I then turn to a wider discussion of the role of peers and social learning.

Ingredient: Trust, Peers and Social Relations

Participants identified adult instrumental learning experiences that would convey technological understanding less frequently than during discussions on childhood learning. While trust in processes of learning had been implied in other participant discussions on childhood learning, one outstanding exception was the recollections in adult learning offered by Tammy, whose current frame of reference was slightly different than the other participants. Tammy was the youngest research participant and her upbringing was urban-based without a declared early connection to farm or rural life. She had a background as a university-trained biologist and was formally educated on natural processes but lacked the tacit, informal knowledge to grow her own food.

Instrumental learning is constituted by the meaning gained by cause and effect events such as skill building. In learning to grow a garden a particular kind of instrumental learning, with definitive skill development, is engaged. For most participants, trust was implicated in their relationships to knowledgeable family members with expertise on gardening skill. Similarly,

rural communities' formative role towards participants' instrumental learning on technical practices associated with food production was noted from childhood memories. However, of the three participants raised in an urban setting, Tammy spoke of her lack of direct involvement with food production and the limited access to such tacit knowledge development. For her, gaining knowledge of how to grow a garden was not easy. Developing a trusting relationship to a knowledge resource, which her mother-in-law provided, gave her the knowledge she now utilizes for her own family's needs. She explained:

I grew up in a city, so when I moved out on my own I really didn't have that knowledge of how to grow a garden and grow my own food and cook my own food really. And I think that's probably true of a lot of people that grew up in the city and didn't have a garden and that. And once you start thinking you'd like to start growing a garden, the knowledge isn't there and you have no idea where to start. And if you don't have those connections with people who do have that knowledge, then where do you get it? *It's really hard to learn how to garden from a book* (emphasis added). You can read all you want but unless you're there and doing it and with somebody who knows how to do it and can show you how to do it for a couple of years. . . . So when I met Chris - and his family are farmers - and his mom has this giant garden, so all of a sudden I have this resource I can phone up anytime, and say 'okay, when do I start tomatoes or you have to give me your pickle recipe again, so that was the point for me when I could say I had that knowledge . . . and so now I have a lot more knowledge so my kids will learn from me. (Tammy, FG 2009)

Tammy's story illustrated elements of instrumental learning inherent in food production and indicated why trust is a significant factor in a learner's ability to absorb information.

Developing a trusting relationship builds confidence between learners and knowledge experts, making the process of learning attractive while simultaneously enhancing the relationship. Where relationships are strengthened, the potential for adult insecurities, such as feeling immature or child-like, is also reduced. Now confident with gardening and food processing, Tammy's knowledge is embedded in her day-to-day practices and she is able to subsequently pass it onto her children.

Learning the basics of gardening from a book ignores the point that learners also require a tacit or intuitive understanding that can only be gained from feel, visual indicators, smell, and so on. This point gives critical importance to the transmission of tacit knowledge versus formal knowledge in food production, as indicated in the italicized text within Tammy's quote (above).

To engage in meaningful learning, suitable timing with trusting resource people and relevant information builds the skills necessary for processes of knowledge creation, as evidenced from Tammy's story on growing broccoli:

Having a resource person is more important to you when you're starting out. Last year was the first time when we were growing broccoli and she came out and she saw that the head was full and I had no idea how to grow broccoli – I had just assumed that when you get to the end of the season, you just harvest it all in. But she said, you know if you cut that off you'll get a bunch more little broccoli after that. And I was like, really? I was totally amazed that what she said was right. (Tammy, FG 2009)

The concept of tacit knowledge acquisition made explicit is evidenced in the above quote. The local expert (her mother in-law) engaged with Tammy and ensured that her production methods and assumptions were corrected. Without a hands-on witness to Tammy's learning and flawed

production methods, her practices would go unchecked. Learning from others through dialogical knowledge utilization frames the following discussion of peers and social relations.

As developed in Chapter Two, communicative learning involves understanding largely shaped by “cultural and linguistic codes and social norms and expectations” (Mezirow, 1991, p. 75). The advent of communicative learning was evident in many of the participant stories regarding the role of peers and social influences in adult life. Having conversations “over coffee” amongst peers, attending meetings to support organizations and social causes, attending church, and working with colleagues contributed to participants’ sense of communicative learning.

For one participant, the local health region’s primary health care collaborative made a determinable difference in his views on wellness as related to food. The collaborative was comprised of Cathy - the health region’s “very passionate” facilitator, a local physician, and other community partners. This collaborative, in tandem with other peer influences, such as CSLP’s newly formed health committee of which he was a member, were persuasive. Peter reflected on his experience with sincerity and seriousness:

As I understand it, [the health collaborative] was to come up with a baseline of potential – of individuals who have potential to develop type II diabetes or coronary heart disease and then do some preventative education that relates to that. So they did form that baseline – I happened to be one of those – and so Cathy came out and set up some community meetings, brought in some people to talk about it, whether it was fitness or diet, etc., etc. And Charlotte and I went to those early meetings. And then when Tammy and Emily came to the community and brought with them a sense of problems related to process foods that kind of goes into the local food production . . . so by osmosis I think, it’s become an issue for me with those two things coming together. . . . I’ve become more educated about it simply

because there's so much attention given to the whole concept of local food production and consumption. I guess I've been able to make these changes, to the extent I have, amid a cadre of friends who necessarily are doing the same things. (Peter, 2008)

Having a group of peers to reflect with and engage in dialogue is considered by Mezirow to be an important element in transformative learning. Peter's reflections on his personal health and the availability of peer dialogue and feedback through the health region's collaborative and the CSLP's health committee, played a critical role in his transformative learning. Peter's experience illustrates the ways in which community and individuals interact in synergistic ways, each influencing the other. The union of Peter's personal reflection with his peer group and health collaborative teamed with movements of action towards localizing food and creating healthy communities indicates a praxis towards social change (transformation). Peter's story also reflects the direct impact of social interactions on knowledge acquisition, re-emphasizing communicative learning patterns.

What distinguishes individual transformative learning from communicative learning is the element of critical reflection and changed perspective meanings, as can be reckoned from this statement on communicative learning: "Probably the way I learn the easiest is by way of example. If my neighbours are doing it or I know somebody and it's working, then I'll do it" (Nel, 2008). As a result of social pressures that imitate power imbalances, communicative learning can also have conformist tendencies.

The influence of peers in shaping participants' motivations for changes in food production and diet was stated in numerous ways. There is little doubt that peers and social relations had significant roles in the ways knowledge was imparted and used in building a local food discourse. The next two ingredients explore the ways transformative learning stems from

experiences where participants had opportunities to critically reflect on their experiences with dominant culture and ideology and enact changes accordingly.

Ingredient: Cultural Values on Ecology and Sustainability

This ingredient explores the way in which one participant critically analyzed the value and placement of ecology in rural Canadian orientations. While other participants questioned dominant practices in relation to agriculture and ecology, Nel's story is a particularly compelling one about the links and revelations made possible when cross-cultural experiences trigger transformative learning. She recalled a "life-altering time" in her adult life where perspective meanings were challenged and critically analyzed.

Nel's lived experience in Africa both contrasted and reinforced some of her prior perceptions of food, health, and cultural values of ecological and social sustainability. She spoke with humility about this experience and the difficulty in readjusting to Craik and Western culture. In Nel's reflection she felt conflicted, describing her mixed emotions after living in a vastly different culture for four years.

In a strange country you're not in control at all. You don't know the language. You don't understand the customs and there's things you can and can't do; you know that if there's things you do, they're perceived different. . . [but] I had way more culture shock coming home than I did going in the reverse. I found people extremely petty when I got home. They would just go on about things that didn't matter and that they couldn't change. . . And the waste – I got so I didn't throw out tin cans or glass jars especially if it had a screw lid. And here we just – we don't even empty them half the time – and we toss them out. And it wasn't even a matter of recycling. There's a life left there. . . . So, it was a real eye opener as far as the way we live and how the rest of

the world lives. I was really quite unhappy [when we left Africa]. It took me three years to get over that and find a niche again and accept the things I could not change and try to make a difference to the ones I could. But I was very discontent. (Nel, 2008)

Nel shared her disappointments with the dominant cultural values held in Craik towards ecology and sustainability, and how difficult she found the journey to change hegemonic practices in her community such as over-consumption and the focus on individual wealth. Defining people as “petty” suggests her aversion to western consumerism, egoism, and people’s lack of acceptance towards cultural differences and sustainable goals. Her involvement with the CSLP was her way of reconciling the divergent values between what she experienced in Africa and her reality in Craik. Craik’s eco-village and other community initiatives, like the localizing food efforts, provided Nel a niche to socialize and work inside. Mezirow might refer to Nel’s experience in Africa as a “disorienting dilemma” that engaged her process of transformative learning and promoted her to challenge prior perspective meanings, as precipitated by her critical reflection of cultural values on ecology gained from experiences in Africa and then upon return to Canada.

Transformative learning can “erupt” from many scenarios such as the cultural clash Nel felt upon arrival in Africa, then again upon return to Craik. Other, more subtle disorienting dilemmas are shaped by events or everyday life occurrences that compel learners to critically reflect on their lives, then attempt to re-learn and re-shape perspective meanings. In some cases changes in perspective meanings are extended to collective/social transformation, through commitments of political activism. The next ingredient explores the relationship some participants had to socio-ecological activism and transformative learning through processes of knowledge utilization.

Ingredient: Socio-ecological activism and events

In recent times, Craik as a community has experienced social changes with its town council's emphasis on environmental sustainability, developments with the CSLP, and the unconventional ideas of incoming residents which conflict with some of Craik's seasoned community members. Despite the acknowledged disparities existent in the community, participants wished to share the strengths vis-a-vis their "alternative vision and action" towards local food, thereby describing the processes of knowledge utilization regarding local food.

Reactions varied as to whether participants felt the growth of interest in Craik towards localizing food networks was part of a global, eco-social local food movement or something more home-grown. There was general agreement by all participants that the attraction to local food was more than a "flash in the pan" (George, 2008), but as one participant noted, "I'd be hesitant to call it a movement yet, except within the cadre of those who are committed" (Peter, 2008).

Participants who had read books on alternative food networks and food activism, such as those by authors Michael Pollan (Nel, FG 2009 & Peter, 2008), Joe Salatin (Peter, 2008) or David Waltner-Toews (Peter, 2008 & Charlotte, 2008), raised issues of globalization, food security, and corporatization of food systems more readily than others in conversation. Books and resources in relation agri-food concepts were made available and accessed through the local library for community members or on-line by participants. Of significance here is the ways in which written knowledge sources, when accessible, have informed and stimulated participants to analyze localizing food efforts more broadly.

Participants, such as interviewees Tammy and Nel, who were members of CSLP's Health Committee and board, supported local food, in particular local, organic food as part of their continuum of causes in ecological/political activism. Tammy (2008) defines her situation and her justifications for supporting local, organic food:

I'm looking at all the different ways I can change my life to make it less harmful to the planet. Where you get your food is a huge, huge aspect of that. . . I think that lots of people probably don't care too much whether it's helpful for the planet or not. Even though that's something I care about it's not something everybody does. And I think healthy food – like I totally believe that organic food is better, but not everybody does. Lots of people it just doesn't matter to them. They just want whatever is cheapest.

Several participants felt that Craik's local food challenge in February 2007 offered an important moment to launch an alternative food vision for the Craik area. Expressed initially in interviews and reiterated in the focus group, in what Mezirow might term a "disorienting dilemma" that "triggers" critical reflection, the local food event had an elucidative effect:

We [CSLP] really looked at that 'supporting your local producer' angle – local producers, here, of food, telling people what they had. That hit home with some people. That is what we want to do is support local. Our neighbours and so on.

(Tammy, 2008)

After the local food challenge two other initiatives were enacted: a local farmer's market and educational workshop series on growing one's own food (e.g., a greenhouse workshop with a knowledgeable facilitator).

The CSLP local food challenge was inspired by a similar event in Saskatoon organized by groups involved with the Saskatoon Food Coalition. One of the main purposes of the

Saskatoon Food Coalition is to promote the implementation of the Saskatoon Food Charter⁷ that perceives local food as an integral part of food security. The Saskatoon Food Coalition is a loosely organized network of organizations and individuals involved in promoting food justice issues in Saskatchewan. The Saskatoon event aimed to challenge citizens to eat locally-sourced foods for two weeks.

Craik's local food challenge added a distinctly rural, place-specific flare with local fruit growers, honey producers, bakers, and eggs, chicken, and meat producers invited to educate consumers while offering a show-case for displaying and selling their wares. Saskatchewan's foremost writer on the subject of local food, and coincidentally, a native 'Craikite' hero - Amy Jo Ehman - was invited to speak at the local food challenge in her home-town. For some participants, this was an event reminiscent of earlier times.

It was like the Craik Fair was – socializing time and something to be learned on top of it. I mean it seems as though there is a fair amount of ... what's the word? Just acceptance, you know. With what the t.v. telling us what we need to eat and we all kind of go along with it. Cause we are all following the 'great t.v.' – it tells us and we go along with it. And you come out here and see people actually doing things and I found it pretty refreshing. (George, FG 2008)

⁷ The Saskatoon Food Charter was organized by the Saskatoon Food Coalition and passed in principle by the City of Saskatoon in 2002. The five key elements of the Saskatoon Food Charter are: 1) food security and production, 2) food security and health, 3) food security and justice, 4) food security and globalization, and 5) food security and culture. Some of the most active Saskatoon Food Coalition members include: Beyond Factory Farming (BFF), Child Hunger and Education Program (CHEP), Core Neighbourhood Youth Cooperative, Heifer International, Oxfam, Saskatoon Food Bank, Saskatoon Health Region, We Are Many (WAM), and individuals who are social justice activists, academics, and market gardeners. For more information: http://www.chep.org/ff/food_charter.html

The challenge event brought together community members that rarely attended other CSLP events. In a subtle yet pivotal way, Craik's local food challenge enacted the discursive capabilities and strengths in shaping processes for knowledge utilization as constituents in transformative learning. The local food challenge also speaks to the ways in which political events shadow previous attempts with similar mandates, as demonstrated by Craik following Saskatoon's lead. Organizers hoping to see changes in Craik's community support for local food believed that their event's success was in part due to the social networking. They also saw it as sparking interest in local food as an environmental and health issue, with the added possibility that localizing food will aid their lagging farm economy. The following months after the challenge witnessed the development of a regular local food market, a workshop series with composting, personal and community greenhouse construction, and articles written for the town's newspaper. Participants shared their interest in coordinating a future event in Craik on local food during the focus group discussion as they wanted to "keep the volume turned on" (Nel, FG 2009).

Turning now to the personal motivations towards localizing food, the following ingredient presents my interpretations of participants' interest in and knowledge of local food and its relationship to personal economic and health well-being.

Ingredient: Personal economy and health

Linking economy and personal health is akin to the practice of farming where historically, economic livelihood comes at the provision of healthy, nutritious food. In this ingredient, selective stories illustrate the utilization of academic and popular knowledge that, through collaboration and shared knowledges, provide new opportunities for economic and health changes. Participants, in their quest to maintain this relationship between economy and

health through localizing food efforts, offered tangible suggestions to get agriculture “back on track,” emphasizing the re-establishment of relations between producers and consumers. Farmers George and Carol shared their story of enacting personal changes towards local food procurement and improving their economic outlook. From my journal (2008) I wrote:

Sunny October morning. We were in the kitchen at my first interviewee’s turn-of-the-century farm house, drinking delicious freshly-squeezed apple juice. We had spoken about the hardship of farming with its rigid policies, lack of institutional support, and economic struggles. Our interview then took a decidedly different turn as this farming duo shared a story about baking bread with me. Enthusiastic about the product, they described to me in detail how they perceive the whole event – getting the local ingredients, making it, marketing and selling it, educating people about its goodness. Despite their mention of bread-making as labour-intensive, it seems to be a proud moment for them to talk about it, especially for Carol. They have become known in the community as “the ones who bake that good bread,” and therefore had achieved some notoriety.

The conversation at this interview detailed a preview of the new changes in Carol and George’s (2008) life towards locally sourcing, producing, and selling bread. The conversation indicated this farming couple’s pathway to knowledge creation and subsequent lifestyle changes. Carol and George’s pride seemed an emotive incitement to this change. The passage also indicated their knowledge dissemination to consumers, where making use of their own personal education on bread was a meaningful thing to do. Unlike other moments in our conversation, Carol contributed more verbally in this portion, perhaps indicating her direct participation in the event and her feelings of satisfaction in doing so.

Yvonne: When did you get into baking bread?

Carol: Just this last year. I guess it's a year since I started.

Yvonne: And why bread? Why did you get into bread?

Carol: I guess we just started. . . (to husband) Why did we?

George: We started researching. Like always, why are we in the middle of wheat country - high country, high quality, high protein wheat? Robinhood used to come and get wheat specifically from the Aylesbury elevator for its mill, cause of the high quality...And here we are now, and I'm saying, "Why isn't there a bakery anywhere?"

Carol: I've had a wheat grinder for years and I had a Bosch that we bought in Lumsden for - one was \$25 and the other \$35 - and they had never been used. A granddaughter -

George: didn't know what she had -

Carol: Yeah, sold her grandmother's estate and didn't know what she had. I brought it home and, so we just kind of started into it. Did a lot of experimenting to get a good loaf of bread. . . .

George: We looked into what is in this loaf of bread . . . then we find out that the whole grain is just a huge health advantage . . . And I was told by this one fella who has quite a list of degrees about food and he says that children - there is one in 35 children in North America that is treated with Ritalin. And his findings are that if you had whole grain diets, it is a slow release into the blood stream. Whereas the over-manufactured converts to sugar too quick. So the whole grain is a huge benefit for children with those kinds of problems.

George evoked a passion and enthusiasm for using whole grains to potentially improve people's health and possibly redesign his and Carol's farming practice to a less onerous and isolating enterprise. In addition, George's interpretation of the "expert's" knowledge indicated how he interpreted and utilized formal, academic knowledge as factual. In the subsequent focus group meeting he reflected on some personal changes he felt towards producing food:

[There's] been a change in machinery and a way of thinking and yeah, it's a monoculture and you feel like you're not even producing food. That's what I really like about bringing in a loaf of bread. . . . I just like that it's a product that I can take through to the end consumer who will appreciate it more than anybody and I like the reaction I get. They really enjoy it - tastes decent, toast it, and put something on it.

Away you go. (George, FG 2009).

The positive feedback George received from selling bread directly to consumers was consistent with other participant's stated enthusiasm for closer consumer-producer relationships. Ensuring a strong connection between farmers and consumers seemed a particularly significant objective in Craik's local food discourse and was voiced by all participants.

Back at the original interview with George and Carol, books relating to bread-making and wheat's history were taken from the pantry shelves, along with literature on whole grains that they shared with customers upon purchasing bread. As an example of knowledge utilization processes, George and Carol's story on bread-making proved useful in demonstrating the ways knowledge was created and disseminated regarding whole grains, bread-making, and potential health advantages. Using Habermas' categories of learning domains, instrumental learning sources included: exchanges with academics on technical details and health advantages, and adherence to the structured details of recipe books;

communicative learning sources included: books documenting the history of wheat and listening to local celebrity and journalist Amy Jo Ehman; and emancipatory learning was acquired from their own “experience of improved health and memory” (George, 2008).

Further knowledge was indicated in the form of popular knowledge dissemination. As George stated that “A huge knowledge for me is actually watching Oprah and Dr. Oz . . . just all kinds of good information that comes through a show like that” (2008). Other participants shared their experiences watching popular movies and celebrities who have made changes in diet and challenged globalized food systems. With their attractive appeals and attention to optics, popular television talk shows and pop stars held significant interest for some participants.

Impetus for knowledge seeking on food-related issues for all participants had to do in large part with personal health and wellness, as based on the perception that local food, and in particular, organic, local food was healthier. Links with health and food ranged from concerns over: junk food consumption; pesticide residue on foods; health problems such as obesity, diabetes, heart disease, and cancer; children’s lunch program regimes; food safety as exposed by the national disaster of Listeriosis in summer 2008; and a lack of accessibility to healthy foods (defined as part of food security). Participants ranged in their depth of discussion and concern over these issues, where some participants elaborated on their own health experiences or concerns, while others mentioned them in passing. Health and its links to food production and consumption were strong associations and were frequently discussed in interviews.

As physical health is immediately tied to general well-being, stories came forth in the focus group on the emotional connections to food. The next ingredient briefly explores the contexts in which food preparation was a source of emotional affirmation.

Ingredients: Emotion, Visceral Feeling, and Spirituality

The utilization of embedded knowledge in food production processes was regarded as emotionally fulfilling for participants. Some specific adult experiences where knowledge was deployed during food production processes and where enjoyment was presented included: baking bread, making jams and jellies, gardening, and tending poultry or livestock. The representation of knowledge in production was clearly more than a means to an end.

Used as a metaphor during other conversations, such as in the focus group, Charlotte noted a recent church service where the service speaker “gave a little spiel on the spirituality of bread making, [commenting] it’s that whole satisfaction of ‘I made this’” (FG, 2009). Other participants echoed the positive visceral feeling and embodiment of tacit knowledge they gained while making, growing, or processing food (Nel/Tammy, FG 2009). For one participant, growing and making her family’s food gave her immense pride and comfort where she reflects, “You just feel good” (Nel, FG 2009). Applying knowledge to labour efforts where the results are immediate and satisfying typically affirms producers of food, and subsequently producing and eating good food offers emotional fulfillment and physical contentment.

Cumulatively knowledge was created and utilized in experiences involving peers and through social interactions, as well as tacit and local knowledge where trust underpinned the learning. Adult learning occurred as a result of cross-cultural value exchanges, socio-eco activism, inspirational events, and personal motivations in economic and health improvements/need. Emotion, visceral feedback, and spirituality were other motivational areas mentioned in relation to food and its connection to knowledge.

The next section sharply contrasts the previous discussions of childhood and adult learning opportunities, knowledge creation, and key ingredients that engage and make affective

knowledge in processes of transformative learning. Rather than exploring those factors that *contribute* to the building and creation of knowledge, the following section explores the *inhibiting ingredients* - the barriers and tensions – in processes of knowledge creation and transformative learning.

Ingredients of Resistance: Dominant Ideology, Power, and Uncertainty

Within every conversation I heard details from participants on the inhibiting factors that prevented them from pursuing their local food objectives to greater depths at both the personal and community levels. In this section I describe the context of Craik's local patrimony where social, ecological, cultural, and political influences override certain kinds of knowledge acquisition and meaning in adult life. The critical *inhibiting ingredient* for participants – and one that fuelled dissent towards other issues (e.g., environmental degradation, economic frustrations) – evolved from their discontentment with dominant agricultural ideologies and practices. Other significant issues - the inhibiting ingredients discussed in this section – indicate how local food procurement efforts were obstructed due to: community resistance fuelled by conflict, power, and competition; and the uncertainties associated with economics and weather. To begin this section, current agri-food ideology (productionist paradigm) and practices are discussed.

Ingredient: Current Agri-food Ideology and Practices

Discontent with current agricultural practices of industrialized conventional farming methods were raised in most discussions, and sometimes in juxtaposition to those of organic farming, which most participants felt was a more sustainable and healthier approach for both people and environment. The main issues around conventional farming centered on: pesticide use, unsustainable practices of monocultures and intensive livestock operations, food sourcing

from non-local areas (for example, purchasing American versus Canadian beef), the economic conundrum of large and expanding farm size requiring increased inputs and machinery, and low commodity pricing. Participants stressed dissatisfaction with the ways farming had gone in the last forty years, mentioning a “lack of control” (Peter, FG 2009), “feeling betrayed by the Monsanto’s of the world” (Nel, FG 2009), or experiencing “insensitivity to the land” (Nel, 2008). Production, too, “has been under the gun for quite awhile with poor pricing and escalating costs all the time” (George, FG 2009). Both the study’s producers and consumers talked about the futility of the current situation in farming and the disconnection to healthy and satisfying food and eating experiences. Nel (2008) said the following about conventional farming:

I think the way we’re doing things is wrong. It’s not sustainable. We can’t farm the way we keep farming – corporate farming isn’t going to work. Farmers used to – even fifty years ago – feed themselves and sell the excess. That’s what a farmer was. That’s not what a farmer is anymore . . . I can’t understand how people can farm and not even have a sensitivity to the land which is living! And you keep pouring all that junk onto the land. It’s not that you can’t even see it. You can go onto a field where somebody’s parked a sprayer and it’s leaked and leached and nothing will grow there for three or four years and they haven’t got the idea yet, can that be really good?

In analyzing participants’ stated frustrations with current agricultural practices, the focus group explored how a “productionist paradigm” (Lang & Heasman, 2004) dominated present-day agricultural systems, where technology and profit is supported at the expense and demise of smaller farmers and environmental sustainability in food production. Accordingly, George (FG 2009) summed up the concept on productionist paradigms:

When we're on a combine we're so far away from our customers it's not even funny. Like we're just out there – we're growing a commodity and [you're putting] as much as you can put in the [grain] bin. It really doesn't have much to do with the food business. You know, I think a lot of farmers don't even think of that themselves.

Participants shared similar contentions as those expressed in the literature review surrounding the corporatization of food systems and the lack of both producer and consumer participation in how and what food is grown and distributed. Despite participants' scorn with conventional farming methods of production and distribution, there appeared to be a sincere realization that converting to organic farming was not easily achieved. Conversion to organics was not perceived as a simple technical switch; but one that required an entire cognitive and ideological make-over, not only for producers, but also for consumers benefitting from insight on their food production methods. In similar conversations during participant interviews - one with producers (George & Carol, 2008) and those "from town" (Tammy & Peter, 2008) on the difficulties associated with farm management shifts towards organic farming - it became clear that Carolan's (2006) notion of "epistemic barriers" was a key obstacle. Very generally, epistemic barriers include the ways in which producers "see" agricultural results: for conventional farming, this tends to be weed-free crops, greater yields, and immediate perceived profit. With organic farming agricultural results are more subtle and tend to include improved environmental sustainability through soil nutrient value and the benefits of biodiversity.

Peter: No one that I know really wants to use chemicals for farming operations, but they're so entrenched at it they can't get out... I think there are two road blocks that are slowing that process down, even for those that want to do [organic farming]. One is that wait time because you have to earn a living in the mean time on your land base.

So, if you can't crop it in the way you're used to, right, there'd be a few lean years, I'm guessing, in there. And secondly, there is still, a bit of a stigma attached to organic production... There are probably some producers out there that don't want to go that route because of what the neighbours will think, you know. You get referred to as (hesitation) – a well –

Yvonne: Well in my dad's day it was known as a "dirty farmer."

Peter: Right there you go! (laughs) That's what I was trying to say.

Yvonne: Because your fields were "dirty?"

Peter: And it's gonna harm mine [crops].

In a similar vein to the "weed nemesis" issue that corresponds with farm management perceptions, Tammy (2008) noted, "I think it's a tough sell. I think lots of farmers would love to do [organic farming], but can't – they're trapped in how they're doing things. They don't see a way out of it." The epistemic shift towards organics was more than just a farmer's dilemma, however. As an economic sector, agriculture – either conventional or organic - relies on the interconnections of producers to other business operators who have both indirect and direct economic interests and stakes in its successes. In some cases these interests noted conflict. In a hushed voice, Tammy stated in our conversation:

I have been at meetings where I try to encourage people to maybe move towards, reducing pesticides use, but there's somebody else in the room whose husband sells pesticides for a living. So now, all of a sudden, you're looking at their livelihood . . . that's what puts food on [their] table. Definitely there can be *tension* there. (emphasis added)

Tammy's description of community conflict – either actualized or potential – indicates the complications associated with alternative personal choices and beliefs that may differ from conventional ones. A desire for pesticide-free agriculture inevitably impacts the livelihoods of others whose work and family depend on the current practice of pesticide use. Logically, it is easy to understand the reluctance to changing current practices in agri-food production for some community members given that their personal stakes are so high. The next section will further explore community resistance to change, developing themes that include perceived competition to leadership and institutional barriers to transformation.

Ingredient: Community Resistance to Local Food

“Resistance” throughout much of the analysis regarding agri-food systems pertains to opponents of dominant, conventional agri-food practices and consumption. This ingredient explores other possibilities for the term resistance where some community members resisted local food advancements in their community.

During the conversations regarding local food and how knowledge was created and utilized within this rural area, words of frustration were expressed about rural culture or socio-political issues that participants felt they had little control over or power to intervene in or change. Part of the frustration seemed linked to other community members' inability or desire for change; while part of the frustration was with themselves. “Any kind of change you know. . . anything worth changing never happens overnight. We're just, as discouraged as we can get. . . think we've nearly had enough” (Nel, 2008). While sensitivity to other community members' viewpoints were considered important by research participants, I also observed that they raised elements of their own personal anxieties about the slow development of localizing food in Craik and the personal commitment of time and energy to see it through: “The focus group participants

discussed how, why, and when their next local food event should occur. They are so personally eager to move the movement forward yet seem so publically tenuous as to assert their ideas” (personal journal, 2009).

Small communities are often held together by relationships and shared meaning, so discussions about tensions or barriers within Craik and the surrounding area caused uneasiness for participants. Barriers to local food procurement was evident in conversations that brought up banking institutions, the Farm Credit Corporation (FCC) and the local Co-op store, an affiliate of the much larger “parent” organization, Federated Cooperatives Limited (FCL). Participants noted that banks and the FCC were more reluctant to offer loans to farmers interested in down-sizing their farming operations to fit a more manageable farm workload or convert sizeable portion of their farms to organic. In the case of the local Co-op two issues were raised: one pertaining to a perceived competition vis-a-vis local food procurement; and second, regarding the local Co-op’s leadership resistance to change.

Frustrated with her inability to bake more than a few loaves at a time in her standard kitchen oven and supply a growing demand for her product, Carol and George (2008) share this story with me:

Carol: There’s one [oven] that’s sitting up at Craik in the lumber yard from the Craik Coop store that’s perfect [for production]. And it’s been sitting there for years and yet he (uncertain who) won’t sell it to me.

Yvonne: Oh, why [won’t they sell it to you]?

Carol: Because I would be competition to the Co-op grocery store.

George: So guess what? There’s competition!

Carol: Because they have McGavin's [bread]. They have their bread dealers bringing, yeah, and I would be competition. So there it sits.

Yvonne: But would you sell it [bread] at the Co-op?

Carol: No.

Yvonne: Well how would it be competition?

George: Well once you've consumed a product by Carol, you wouldn't want to go back to McGavin's anymore; you really shouldn't. Shouldn't be eating it in the first place.

Carol: So those are the kinds of things we, we've been looking for . . . We looked into buying an oven for 26 loaves – it's like \$10,000 to buy a new one, so it's cost prohibitive.

George: That's just business. What it boils down to – is nothing more than business. He would not want to sell it [oven] to her because all of a sudden she's producing, well, a 100 loaves a day. They would be sold to local people so all of a sudden they're [Co-op] not selling a 100 loaves of [McGavin's] bread a day. But it's not just a 100 loaves a day; it's the draw that the bread is.

Similarly, another participant, Peter, a member of the local Craik Co-op Board of Directors, spoke about his dilemma of wanting to support growth of local food procurement while being aware of the potential change this might bring to the Co-op. His evaluation of the situation was compelling as it raised some significant issues for local food proponents and community members to resolve about: i) attending to whose interests might be served in localizing food; ii) continuing to support the cooperative sector that has a long history and

integral role in rural survival in Saskatchewan; and iii) offsetting the social divisions that change sometimes create.

Well, the local food co-op, like this one [in Craik], procure their food from Federated Cooperatives almost exclusively. So it comes to us in the form of process food from somewhere. Or fresh produce in the winter or summer, from out-of-the country.

Although, because Saskatchewan is self-sufficient in potatoes, we're able to go to the Craik Co-op and get potatoes from Craven. It's as local a vegetable as you're going to get at any small Co-op like this . . . and you can't get any organic produce. Well you can now, but it's the Earthbound stuff they bring in from California. So, whether the whole spirit of local food production and consumption will cause a change in how local food co-ops, the ones that are tied into Federated Co-ops operate, I don't know. I don't see that in the near future. Because there's that link between the retailer and wholesaler – they're the ones that bring that stuff in. And out here it's very difficult because as soon as you – you know the prices here are higher than anywhere else already, for stuff like produce and food stuffs, etc. and so if you add a whole organic line, which tend to be more expensive, I don't know if there's a consumer base for that – yet... There's the thing – do you want the [Co-op] business to survive or not? So I find myself in a bit of a quandary. (Peter, 2008)

At the focus group this same participant seemed even more perturbed by the conflicting issue of wanting the local food concept in Craik to succeed, while also recognizing the tangible economic hub the Co-op has provided, despite its connection to FCL.

We have monthly [Co-op] board meetings and we are trying to keep viable the local food store and the other services that the Co-op provides. And currently – if I was

involved personally for a big push for local food, etc. – I would quickly be perceived by some, perhaps, as a-, what’s the word? Something that detracts from the bottom line of any local business. . . . So, I’m thinking if this [local food movement] grows - and I’m positive it will - I might find it fairly uncomfortable to be on that local board. . . . There will be a point when that huge Federated Cooperatives – local Co-ops are tied directly to it – when they will have to make significant changes to take into account this growing movement” (Peter, FG 2009).

Peter’s personal conundrum surrounding the Co-op’s resistance to embracing local food, coupled with his anxiety about affecting the Co-op’s ability to economically maintain itself, was evident. Potentially facing a decision of whether or not to resign from the Co-op Board to pursue localizing food initiatives - and by doing so, relinquishing a degree of personal and public power - may prove to be a critical personal challenge and a transformative act for Peter.

As many of the stories revealed, local food was more than a material desire, and hence, initiatives to propel the concept of local food forward had some members of the community resisting the process. The focus group discussion explored ways in which community education might mitigate some of the resistance by hosting workshops, seminars, teach-ins, and projects. As the next theme discusses, however, some issues regarding localizing food efforts are unclear and difficult to resolve with community development and education.

Ingredient: The Uncertainties of Economics and Weather

The economics of food, such as what consumers might be willing to pay or the “hidden” costs associated with food production, such as soil depletion in growing monocultured cereal grains like corn, has long been regarded as a complicated and contentious debate. To many farmers in the production line of agriculture, the economy and its dependence on agri-food

global exchanges has been a source of anxiety and confusion with uncertain outcomes. In this research, discussions on the economics of food and food production included: profit margin discrepancies between farmer and retail corporations, cheap food pricing (processed versus fresh), affordability for budget-stretched families, and the lack of desire to pay more for food, even if it was local.

Participants were not consistent when voicing their opinions on how consumers regarded support for local food that might cost more: “I still think the bottom line is money. If you polled a hundred people if they would support local they would say, ‘Yes, as long as it’s not going to cost me anymore money’. . . There’s a point where the dollars and cents, you know, come in” (Charlotte, 2008). Another participant had a contrary view: “People will say I don’t care if it costs me more for my [local] food and my meat. I want to live healthy and I’m going to live healthy” (Nel, 2008).

Further to the economic provision of year-round local food supply, participants in the focus group acknowledged that the harsh prairie winters remained a main environmental obstacle – and economic quandary - particularly regarding fresh produce procurement, which has become common fare for most consumers. To this end, participants shared the expectation that food would need to be supplemented for some seasons and for diversity in stock. Furthermore, food was discussed as more than a fuel; food was a cultural symbol, a comfort, and a class issue, where lower income community members might be excluded from purchasing local food because of higher associated costs. Of note, only one participant discussed the modifications necessary to make local food affordable for low income earners, perhaps signifying that localizing food intentions are focused more on consumers with larger disposable incomes.

This section, ingredients of resistance, indicated the tensions, barriers, and realities that mitigated ambitious achievements towards localizing food in Craik. Further, the uptake of knowledge was obstructed due to circumstances beyond the knowledge itself, such as the positioning of power dynamics, hegemony, and dominant practices.

Chapter Summary

This chapter developed the claims of knowledge and learning domains widely indicated in participants' conversations and temporal recollections of childhood and adult knowledge creation and utilization. Factors contributing to or inhibiting knowledge uptake were designated to each section using a food-related metaphor of "ingredients." Contributing ingredients indicated determinants, as they were discussed and explored, for meaning-making, knowledge creation, and transformative learning around local food. Collectively, the sections on childhood and adulthood represent my interpretations of the participants' stories through the contributing ingredients of: home and family life; cultural, material, and emotional connections to food; gender identity and role models; community, peer, and social learning; cross-cultural values; socio-ecological activism and events; personal economy and health; and visceral feeling and spirituality. The final section on resistance included inhibiting ingredients such as: current agri-food ideology; community resistance to local food; and uncertainty in economics and weather.

What frequently complicated the process in interviews and focus groups was the difficulty in discussing the term "knowledge creation" as a key factor in transformative learning and thus, conversations explored meaning-making in more discreet ways. I rarely asked directly about "knowledge" acquisition as it became apparent that participants often associated the word with an explicit, formalized knowledge of institutional learning. Knowledge was spoken of

through metaphors, and thus the reason to categorize knowledge constituents through the term “ingredients.”

Acquired knowledge for participants, as presented and categorized in the childhood learning section was significantly stated in the interviews. Participants detailed their experiences as gained through means of tacit knowledge and socialization, and as including epistemic formations and development of cultural norms, values, and customs. Emotionality was also noted in the memories of knowledge acquisition including: the comforts food provided, the necessary trust in learning scenarios, and the amalgam of frustration, joy, boredom, gratification, anger, and love cast upon food production. With this in mind, I move into Chapter Five where these sections are further interpreted for their significance to meaning-making and transformative learning in relation to local food in one rural Saskatchewan site.

CHAPTER FIVE

DESSERT AND DISSERT: CONCEPTUAL RECIPES OF LOCAL FOOD

As stated in Chapter One, the purpose of this study was to gain insight into knowledge creation and utilization as they contributed to personal and collective transformation in the context of a local food discourse in rural Saskatchewan. The findings presented in the previous chapter aptly demonstrated this purpose by detailing how, when, and by what means knowledge(s) were either actualized or potential constituents in transformative learning for participants. Furthermore, Chapter Four suggests that other meaning-making factors influenced participants' interest in personal and collective change, addressing the more specific research questions posed.

The sections of childhood and adult learning indicated contributing ingredients as interpreted from the stories of participants' lives as they progressed between developing patterns of behaviour regarding food production to their current interests in localizing food networks. The complexity of dynamics, as these temporal shifts were occurring, construed ingredients in a variety of areas: claims to knowledge (tacit, local, popular, academic), visceral or emotive feelings, hermeneutical, spirituality, socio-cultural, ecological, political, economic, and well-being. On the margins of these sections persisted power and control issues, or inhibiting ingredients, woven into a camouflaged, hegemonic fabric of rural life in Craik, as described most succinctly in the section "Ingredients of Resistance" In this chapter, I offer conclusive remarks about these ingredients and their relation to the study's main themes of knowledge creation and

utilization, and transformative learning theory. Ingredients are offered as elements in creating an overall metaphoric “recipe” for learning and knowledge utilization in relation to the local food discourse developing in Craik. Finally, I propose recommendations for the study’s potential uses for the collectives and individuals interested and engaged in localizing food networks in Saskatchewan and for the academic researchers that choose to investigate them.

Knowledge Creation in Craik’s Local Food Context

“Intuitively relocalization of food implies a mobilization of knowledge.” (Fonte, 2008, p. 211)

As detailed in Chapter Two, knowledge creation as interpreted in this research follows a general Habermasian orientation where technical, practical, and emancipatory learning are generated from an initial human interest(s). Initial human interest, *specifically* pertaining to practical and emancipatory knowledge domains, is understood in relation to Mezirow’s “perspective meanings” that constitute orienting frames of reference, similar in understanding to Kuhn’s idea of “paradigm” or Foucault’s “episteme” in which “composite codes of a culture [govern] its schemes of perception, language, values, and the order of its practices” (Giddens, as cited in Mezirow, 1991, p. 42). Study participants’ perspective meanings were woven into stories throughout the sections on childhood and adult learning and given titles as ingredients (for example, home and family relations, peers and social relations, and personal economy and health).

In reiteration, Mezirow delineates three meaning perspectives: epistemic, sociolinguistic, and psychological, and I will discuss each of these in turn briefly here in relation to my data analysis. Where knowledge was understood to be produced over time (such as by repetition of something; attending to similarities and differences), epistemic meaning perspectives were engaged. Examples from the participants’ stories included the tacit knowledge acquired from

gardening stories or the ways in which slaughtering within communities occurred in “previous times.” Epistemic meaning perspectives were indicated in factors such as sensory (seeing, hearing, doing) and time (for example, the wisdom of elders in tacit knowledge, regarded by some participants as “tried and true”).

Many stories were interpreted through ingredients in relation to sociolinguistic meaning perspective such as: agricultural “paradigms,” gender mentoring, cultural symbols and identity, relationships with community and others, competition, and local food challenge as a source of inspiration. The practical knowledge created through these experiences was transmitted via language, social and cultural “norms”/role mentoring, and trust. A majority of the participants’ stories revealed some aspect of sociolinguistic meaning perspectives towards knowledge creation/utilization and transformative learning. I surmise that this “slant” in the findings may be partly due to my own social constructivist orientation to knowledge, thus influencing participant-researcher discussions.

In relation to sociolinguistic meaning perspectives, the area of practical knowledge creation/utilization in the findings that aroused my curiosity was the attention paid by some participants to popular media/knowledge. Some participants emphasized cultural icons’ influences on their local food interest and understanding. In one particular interview, the participant felt affirmed in his beliefs on food and health *due to* an endorsement of a popular talk shows host. “Well a huge knowledge – at least for me – is actually watching Oprah and Dr. Oz . . . you know, just all kinds of real good information that comes from watching a show like that” (George, 2008). Other participants spoke about popular films exposing critical food analyses.

Psychological meaning perspectives were indicated in stories relating to self-concept, control, tensions between community members, and inhibitions. The comment, “Producers out

there that don't want to go that route [to organic farming] because of what neighbours will think" (Peter, 2008) is an example of the views exemplifying a psychological meaning perspective. Psychological factors that prevent one from embracing change or transformation were indicated in subtle ways in conversations, however, further studies would be required to fully understand their impact on participants' willingness or resistance to changes in daily behaviours, diet, and lifestyle to accommodate local food.

Not all ingredients listed in Chapter Four would be necessarily categorized as perspective meaning factors. Factors that elicited *emotive or visceral feeling*, such as how food production "felt" to those who gardened or farmed, were difficult to associate with a meaning perspective. "It just feels good" (Nel, 2008) indicates strong visceral attachment or intuitive meaning in some participants' stories. *Spirituality* was also raised in the stories such as the making of bread. Mezirow's perspective meaning factors do not appear to take into account these (italicized) ingredients. Iterating similar contentions, Taylor (2000) noted that some studies found "the present definition of a perspective transformation [was] too narrow and too rationally based . . . again discounting other ways of knowing" (p. 297). For this study, which emphasized multiple knowledges and meaning-making factors, I found Mezirow's confined factors in perspective transformation problematic and would require further exploration to indicate the impact of these unaccounted-for determinants.

Mezirow (1991) contends that meaning perspectives pertain specifically to the domains of practical and emancipatory knowledge, arguing that technical knowledge employs a distinguishable logic implicit in solving problems towards skills improvement. Regarding technical knowledge creation/utilization, participants raised some interesting knowledge

ingredients such as: the knowledge derived from books, local or lay knowledge, and exchanges with academics on technical details.

By far, the most prominent factor in technical knowledge transmission and utilization was sought via lay knowledge experts, where participants learned place-specific practices and methodologies of farming, soil quality, plant, animal, and weather traits and responses, and food processing skills. It was recognized, however, that local knowledge is undergoing a radical deterioration as fewer people are producing or processing their own food, and localized agri-food skills and practice are being lost. As noted in Chapter Four, Peter's (FG 2009) lament, "whether the knowledge that we all grew up with will be grandfathered out of existence I don't know," is indicative of a shifting landscape in rural lay knowledge, and suggests where localizing food networks may have a determinable role in safeguarding this knowledge form. As confirmed by one participant, "That's why the local food movement is so important – to bring back that knowledge, those skills" (Peter, FG 2009). In her study on relocalizing food networks in Europe, Fonte (2008) iterates a similar argument for protecting lay knowledge:

In the perspective of knowledge dynamics, local food networks may not only represent a resistance to the global, placeless reorganization of food chains, but may also challenge a continuous trend towards the simplification and homogenization of agricultural techniques and agri-ecosystems and lead to re-evaluating traditional/local forms of knowledge and techniques as a specific and important resource in the management of agricultural and natural ecosystems. (p. 212)

In conclusion to this section, I have interpreted four significant dimensions for studies pertaining to knowledge utilization from this research: 1) the importance of identifying how meaning perspectives play a role in the reception/use of (new) knowledge; 2) the necessity of

including factors of emotion, intuition, and spirituality in learning and knowledge uptake; 3) how the dissemination of popular knowledge introduces or reinforces socio-cultural norms and values; and 4) what potential (still) exists when lay knowledge is applied for localizing food networks.

Transformative Learning in the Context of Local Food

Mezirow (1991) asserts that personal transformation involves more than seemingly everyday occurrences of changing specific attitudes, emotional responses, or beliefs (which he defines as meaning schemes). Less frequently occurring transformations involve the shifting of meaning perspectives, including phases of disorientation, reflection, and then assessment or re-reflections; shifting into changes to epistemic, sociolinguistic, or psychological assumptions; and eventually culminating in new action(s). Indeed, Mezirow's (1991) transformative learning theory (TLT) suggests a ten-steps process for transforming meaning perspectives, beginning with a "disorienting dilemma" or significant emotional experience understood to ignite transformative learning.

In the study, participants noted changes in their personal lives and community that might be interpreted as transformations of meaning schemes where specific beliefs, emotional reactions, and attitudes are altered, "self-correcting" their prior interpretations (Mezirow, 1991). These transformations, while not insignificant, are also not uncommon in adult life. However, in the interviews and reiterated in the focus group, I heard charges that, in particular, the local food challenge held significance beyond what might be expected from other community events. I therefore, interpreted that the local food challenge might have a "disorienting" effect on some of the participants, motivating them to critically analyze and self-reflect on their personal behaviours and food definitions. The conversations with participants did not lead me to believe

that such transformations of meaning perspectives was “completed,” although some aspects of such transformative learning were well underway. Participants often acknowledged their own ambitions towards local food procurement and further discussions with others, but suggested that Craik “isn’t there yet” (Nel, 2008).

Aspects of transformative learning through perspective meaning changes were indicated in a number of participants’ stories. Nel’s story of cross-cultural learning was significant to her personal evaluations of ecology, cultural value, and ability to enact social change. Other participants indicated some elements of their own transformative learning towards a local food “ethos” through the following: reflections on their past behaviours (e.g., methods of farming/gardening); metaphors indicating inhibitions and other emotions towards personal change (such as the community tensions and participants’ (un)willingness to challenge these, or frustrations of current dominant paradigms); developing relationships with other like-minded people (such as the peer group/CSLP); acquisition of knowledge and skills for implementing new plans (e.g., Carol’s new bread initiative); and planning a course of action towards localizing a food network (such as some reconnections of farmer-producer or the new Farmer’s Market in Craik). In some cases, participants’ personal transformation of meaning perspectives seemed *caught in the vanguard* of a larger collective transformation, where other community members lagged behind and posed institutional barriers towards an advancing local food network (for example, the local Co-op). For this reason, it is hard to imagine Craik as a community, shifting towards a collective transformation, or as Peter (2008) suggests,

To have a [local food] movement you’d have to have a critical mass. I’d be hesitant to call it a movement yet, except within the cadre of those who are committed. . . I think

on a scale of zero to ten, if up around a ten you could call it a movement, we'd be about a five.

Conclusion and Recommendations

In conclusion, I offer some recommendations based on my analysis of the study participants' discussions, the literature orienting the study, and my assessment of localizing food networks. As a first recommendation, contributions from grassroots groups and interested individuals need to be heard from and addressed by the federal and provincial levels of government on localizing food networks. Participants from this study and the many food-conscious consumers and producers interested in healthier and more transparent food systems need greater access to influencing policy. One present opportunity to engage with others on the design of federal food policy includes the *People's food policy project: Building food sovereignty in Canada from the ground up*. This project's ultimate goal is a suite of food policies, generated by the people working on food issues across the country, which will together provide a just and sustainable food system – food sovereignty – in the face of the imminent breakdown of the current globalized food system (Food Secure Canada/Sécurité Alimentaire Canada website, 2009).

The second recommendation promotes that further study be conducted to explore how Saskatchewan producer and consumer bases are positioned to adapt to local food networks. One suggestion for this investigation may be to adapt Fonte's (2008) study on motivations for localizing food in Europe. Fonte (2008) offers that local food achieved popularity for her study's participants through two perspectives: "reconnection perspective" (farmer to consumer relations) and the "origin of food perspective" (promotion of traditional agricultural technique and product valorized). In Craik, participants gave the former perspective more attention in

communicative/practical and technical terms, with more ideological attention paid to the latter. In other words, the participants' strategies for localizing food in Craik involved creating systems for consumer opportunity and engagement with producers to purchase (local) products. The origin of food perspective would involve deeper ideological and discursive work, not only among Craik members but with other layers of society (government, university). Simultaneously, the origin of food perspective seeks to promote and adjust production methods to eco-agriculture, while valorizing local foods in the community. Conceptually, these two perspectives might function to serve Craik consumer and producer interests in localizing food networks, with potential spin-offs culturally, ecologically, and economically. Exploring the relevance of the reconnection and origin of food perspectives in Saskatchewan's localizing food efforts is deserving of additional study.

A third recommendation is that a robust interdisciplinary study occur on localizing food and its implications for agriculture, economy, health, social studies, and public policy. From my literature search on food localization efforts *in Saskatchewan*, I claimed that considerable "grey" literature existed with only a few related materials in academic studies (for example, on collective kitchens or alternative/sustainable agriculture paradigms). Therefore, an interdisciplinary study on localizing food networks, with a comparative focus on Saskatchewan in relation to other jurisdictions, or as a stand-alone study, would prove beneficial to localizing food efforts in this province. With the colossal attention paid to localizing food networks throughout the world, the inevitable presence of a closer connection to local food products in Saskatchewan will require greater scrutiny and support than is currently provided among academic researchers.

A fourth recommendation acknowledges that the localizing food efforts of this study's participants contributes to a wider global eco-social movement, therefore research using social movement theory as an orientation seems appropriate and warranted. During the course of this research, I was conscious that the local food context being researched was perched on the verge of "something" larger and therefore I found involvement in the study to be both exciting and meaningful. Given the vast ensemble of books, televised cooking shows, community gardeners, organic restaurants, and so forth, instilling ideas for a re-articulation of agri-food systems, Craik as a community was cautiously shifting towards the new social movement local food represents. As Peter aptly noted in the interviews, Craik's small cadre of locavores were in a "movement ahead of a movement." I interpreted Peter's claim to signify that Craik *as a community*, was not ready to embrace the changes agriculturally, culturally, nor gastronomically being discursively addressed among the small group of local food enthusiasts living there. Perhaps my previous suggestion that the study's participants were "caught in the vanguard" of a larger, eventual community shift might warrant future studies on a developing local food movement in Craik, with social movement theory as a suitable orientation.

Finally, I recommend that more collaboration between local experts and academic experts persist in developing knowledge resources on local food where the research's intent is controlled and vested within the community. Requests by study participants for new knowledge (for example, how to successfully market and attract people to local, organic food) was raised in conversations. Study participants felt that new knowledge needed to be identified and coordinated at the local level by community members interested in sustaining food localization efforts. Unable to match participants' demand for more access to technical expertise/knowledge within the scope of this study, I recommend that more collaborative work with the community of

Craik and the academic and professional community is required. Fusing the ways knowledge is constituted and mobilized in Craik - with understanding and assistance by outside expertise - creates rich opportunities for advancing their food localization network and the social and environmental objectives from which it was born.

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APPENDIX A: LETTER OF INVITATION



October 6, 2008

RE: Letter of Invitation to Participate in Study

Dear _____,

I am a Master's Student in the College of Education, Department of Educational Foundations at the University of Saskatchewan. The project I am doing is a research study entitled *Cartography of Knowledge: Mapping Transformation in the Local Food Movement*.

In this study I hope to conduct two interviews with participants with each interview lasting from 30 minutes to two hours. Additionally, I would like participants to meet one another to discuss knowledge and local food in a focus group meeting that would be scheduled between the interview times. This focus group meeting would last from between two to three hours in duration. The overall time frame for the interviews and focus group meeting will be over the next three to five months. Your participation is a time for you to reflect upon the interest you have of the concept of local food.

If you are interested in learning more about this study, please contact me for more details. I can be reached through email at yeh982@usask.ca or by phone at (306) 653-4390. If you wish to contact my supervisor, Dr. Marcia McKenzie, she can be reached at marcia.mckenzie@usask.ca or by phone at (306) 966-7551.

This study received the University of Saskatchewan Research Ethics Board approval on September 25, 2008. Information can be obtained from the Ethics office by calling collect to (306) 966-2084.

Thank you for your consideration.

Sincerely,

Yvonne Hanson

APPENDIX B: SEMI-STRUCTURED INTERVIEW GUIDE

1. Tell me about yourself. What is your background (for example: ethnicity, family, relationship to eating or producing food)?
2. Given your background, what perspective do you bring to the culture of local food?
3. How do you define local food? Why is local food so important to you?
4. What motivates you towards your interest in local food culture?
5. Have you found that eating or producing food locally has changed or transformed aspects of your life? Your community? How?
6. In what ways has different kinds of knowledge influenced your interest in local food?
7. Regarding the future of local food:
 - A) What future do you see for local food culture in this area? And more generally?
 - B) What needs to happen in order for that to occur?
 - C) Who or what things do you see assisting with this?
 - D) Where do you want to see yourself in the future of an evolving local food culture?
8. In reference to knowledge utilization:
 - A) Is there some information or expertise you feel would assist or be helpful to you in furthering the objectives of local food?
 - B) Has there been any knowledge imparted that prompted or supported your interest in local food from outside the community?
 - C) How do you view collective shifts or community embracing of local food?
 - D) Has this been supported by research? Other?

APPENDIX C: FOCUS GROUP MEETING

MARCH 4, 2009

Knowledge and Transformation Discussion Guide

I. Personal Transformation

- Challenges and struggles: pair off and pick at least 3 areas in how a move towards local food will affect you (your livelihood, your daily routine, emotional level, physical level, relationally)
- What practices or behaviours in your daily lives will change as a result?
- Explore why it is that you might feel this way
- What significance does this have for you? Is it sustainable long-term?
- In other life changes, what was the hardest part for you?

II. Collective Transformation

- What challenges exist in the wider community to making this local food movement more widespread?
- What does this mean for our concept of food or our relationship to it?
- What does this mean for agriculture as a whole and in particular, those who produce the food we define as 'local food'?

III. Mapping Exercise

- Mapping knowledge towards transformation – What is knowledge? In what ways is knowledge applied to food and agriculture?
- How has knowledge been created in Craik regarding local food and how has that knowledge been utilized?
- Critical Ingredients: what has gone into this knowledge? Do you 'rank' knowledge?
- Mental mapping: embedded knowledge in our culture regarding food (i.e. shopping at a grocery store)
- how is knowledge embedded/embodyed in Craik?
- in what ways might these knowledges be transformed?
- What needs to happen to 'shift' the culture towards food towards a local food culture?

APPENDIX D: INTERVIEW CONSENT FORM



Dear participant,

You have been invited to participate in a research project entitled: *Cartography of Knowledge: Mapping Transformation in the Local Food Movement*. Please read this form carefully and feel free to ask any questions you might have.

Researcher Name and Affiliation: Yvonne Hanson, Master's candidate in Educational Foundations, College of Education, University of Saskatchewan, phone: 653-4390; email: ych982@usask.ca

Supervisor: Dr. Marcia McKenzie, Educational Foundations, College of Education, University of Saskatchewan, phone: 966-7551; email: marcia.mckenzie@usask.ca

Study Purpose and Procedure: The main purpose of this study is to gain insight into knowledge creation and utilization as processes of personal and collective transformation in relation to the local food movement. In the coming weeks and months, I hope to meet with you for two interviews to discuss your involvement with local food at a location preferable to you. Although I have prepared some questions, I hope to keep our encounters "conversational" in order that we might dialogue about issues as they may arise in the interview. The interviews will last from 30 minutes to two hours. The interview process will be your time to answer questions, offer suggestions and share stories. The interviews will be tape recorded then transcribed. I will be the only person transcribing the data unless I hire someone. If I choose to enlist the services of a transcriber, he/she will sign a letter of confidentiality to protect your identity. Copies of the transcripts will be given to you for review should you wish to add, delete or modify them. As well, during the interview, if you wish to shut the tape recording machine off you are free to do so.

Potential Benefits: In return for the time you are investing, this study may assist you in reflecting upon and assessing your interests and contributions to the local food movement. The research also has the potential of furthering local food procurement in the Craik-Davidson area with greater community understanding and access to it. While it is hoped that the research has both personal and community benefit, it is not guaranteed to ensure this.

Potential Risks: There are no known foreseeable risks in this study.

Storage of Data: In keeping with ethical protocol, all recordings, notes and transcripts will be packaged by me and stored by my supervisor (Dr. Marcia McKenzie) for a minimum of five years from the date of the study's completion in a secure cupboard or room at the University of Saskatchewan. After this time the stored data will be destroyed.

Confidentiality: Each interview session will last from between 30 minutes to two hours. As a means of confidentially protecting your identity, pseudonyms will be used in the research writing. You will be given ample time to review the transcripts to ensure that they accurately reflect your thoughts and you are free to delete, add or modify them as you see fit. I understand that the interview location may not be conducive to tape recording and if this is the case, I will make notes and then share these with you.

Because Craik and Davidson are small towns where people are familiar with one another, it is possible that you may be recognizable to others based on what you have said. I will do all that is possible to ensure your rights to anonymity, including use of pseudonyms and making abstract your stories, if this is something desirable by you.

The results of the final study will be used in my thesis and possibly in other publications or at workshops and conferences. In any public use of the data generated from this study, I will respect your wishes and use only the agreed-upon quotes and information.

Right to Withdraw: Your participation is voluntary, and you can answer only those questions you feel comfortable with. There is no guarantee that you will personally benefit from your involvement. The information that is shared will be held in strict confidence and discussed only with the research team. You may withdraw from the research for any reason, at any time, without penalty of any sort. If you withdraw from the research project at any time, any data you have contributed will be destroyed at your request.

Questions: Please feel free to ask any questions concerning the research project at any point; you are also free to contact the researchers at the numbers provided if you have other questions. This research project has been approved on the ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on September 25, 2008. Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). You may call collect as you live out of the Saskatoon area.

Follow-Up: You will be notified of the research study completion and where to find a copy of the thesis once it is approved.

Consent to Participate: I have read and understood the description provided and have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

_____ (Date) _____ (Name of Participant)

(Signature of Participant)

(Signature of Researcher)

APPENDIX E: FOCUS GROUP CONSENT FORM



UNIVERSITY OF
SASKATCHEWAN

Dear participant,

You have been invited to participate in a research project entitled: *Cartography of Knowledge: Mapping Transformation in the Local Food Movement*. Please read this form carefully, and feel free to ask any questions you might have.

Researcher Name and Affiliation: Yvonne Hanson, Master's candidate in Educational Foundations, College of Education, University of Saskatchewan, phone: 653-4390; email: ych982@usask.ca

Supervisor: Dr. Marcia McKenzie, Educational Foundations, College of Education, University of Saskatchewan, phone: 966-7551; email: marcia.mckenzie@usask.ca

Study Purpose and Procedure: The main purpose of this study is to gain insight into knowledge creation and utilization as processes of personal and collective transformation in relation to the local food movement. Some participants in this focus group meeting may or may not have participated in previous interviews that explored their personal interests and associations with local food. This focus group meeting will be tape recorded and I may wish to quote you directly from today's session. Individual's names will not be used in or associated with the quotes. I will be the only person transcribing the tapes unless I hire someone. If that is the case, the person enlisted for this service will sign a letter of confidentiality that protects your identity. I will also be taking notes to ensure that I capture the important points raised. The focus group meeting will be approximately two to three hours in length.

Potential Benefits: In return for the time you are investing, this study may assist you in reflecting upon and assessing your interests and contributions to the local food movement. The research also has the potential of furthering local food procurement in the Craik-Davidson area with community understanding and access to it. While it is hoped that the research has both personal and community benefit, it is not guaranteed to ensure this.

Potential Risks: There are no known foreseeable risks to this research.

Storage of Data: In keeping with ethical protocol, all recordings, notes and transcripts will be packaged by me and stored by my supervisor (Dr. Marcia McKenzie) for a minimum of five years from the date of the study's completion in a secure cupboard or room at the University of Saskatchewan. After this time the stored data will be destroyed.

Confidentiality: As a group, you will be asked to share your thoughts on the role of knowledge in your interest and lifestyle as it relates to the local food movement. You are free to participate in the discussion as much or as little as you wish as your participation is optional. The discussion

in this focus group meeting will be tape-recorded but in the transcription, people's names will not be used; rather, pseudonyms will be used. Writing up the discussion in this regard is an attempt to assure your anonymity and confidentiality. Any member of the group is free to shut off the tape recorder if they feel necessary.

In this focus group meeting, many of you will know one another. I would ask that you maintain the integrity and confidentiality of all participants in the group by not sharing the information discussed, outside of this circle, particularly as it relates to any sensitive or personal information. Please note, however, that although the point of confidentiality will be clarified at the beginning of this session in the hope of minimizing this risk, I cannot guarantee that participants will maintain the confidentiality of others.

The results of the final study will be used in my thesis and possibly in other publications or at workshops and conferences. In any public use of the data generated from this study, I will respect your wishes and use only the agreed-upon quotes and information.

Right to Withdraw: Your participation is voluntary, and you can answer only those questions you feel comfortable with. There is no guarantee that you will personally benefit from your involvement. You may withdraw from the research for any reason, at any time, without penalty of any sort. If you withdraw from the research project at any time, any data you have contributed will be destroyed at your request.

Questions: Please feel free to ask any questions concerning the research project at any point; you are also free to contact the researchers at the numbers provided if you have other questions. This research project has been approved on the ethical grounds by the University of Saskatchewan Behavioural Research Ethics Board on September 25, 2008. Any questions regarding your rights as a participant may be addressed to that committee through the Ethics Office (966-2084). You may call collect as you live out of the Saskatoon area.

Follow-Up: You will be notified of the research study completion and where to find a copy of the thesis once it is approved.

Consent to Participate: I have read and understood the description provided and have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

_____ (Date) _____ (Name of Participant)

(Signature of Participant)

(Signature of Researcher)