

**THE ROLE OF TRANSFORMATIVE LEARNING IN
FOSTERING A MORE SUSTAINABLE SOCIETY:
THE CASE OF CONSUMING ORGANIC IN CANADA**

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THE ROLE OF TRANSFORMATIVE LEARNING IN
FOSTERING A MORE SUSTAINABLE SOCIETY:
THE CASE OF CONSUMING ORGANIC IN CANADA

BY

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A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of
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MASTER OF NATRUAL RESOURCES MANAGEMENT

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Abstract

Food is a powerful symbol in the struggle to transition to a more sustainable pathway, and interest surrounding food and food security has increased steadily over the last few years. The choices citizens make around food have deep environmental and social impacts within their communities, and around the world.

This research explores organic farming as an example of resource management grounded in community and environmental sustainability, and how it affects the learning of those who seek it out. The underlying premise is that food is the basis of societal organisation, and that the conventional food system (and therefore our societal organization) is unsustainable having been undermined by a number of interdependent factors including the globalisation of our food supply focused on trade liberalization, introduction of genetic engineering technology, and loss of local farmers, local foods, and therefore biological diversity and system resilience.

Using transformative learning theory, the research explores the learning that takes place amongst adults who consume goods directly from local organic producers, and how this affects their worldview. The ultimate question investigated is whether transformative learning can create lasting change amongst learners, resulting in more environmentally responsible decision making, and therefore a more sustainable society. The objectives of the research examine the individual learning associated with differing models of organic farms; understand why people support organic farmers; explore what this means in the transformation of individual normative ideologies, and the potential impacts on sustainability; and communicate the findings.

The research was conducted on the East Coast of Canada through face to face interviews, as well as through the researcher's own observations while working on the organic farms. Three different models of producer/consumer interfaces were considered: a market garden operation, an education and outreach centre, and a Community-Shared-Agriculture project.

The researcher found that all participants experienced some form of either communicative or instrumental learning. The role of informal, experiential learning was key in creating shifts in participants worldview related to food and environmental issues. Eight participants identified transformative learning experiences related to food, and their stories showed that the change was long-lasting, shared with others, and contributed to a more sustainable society. Closing the gap between producer and consumer through direct contact with the farmer at a market, visiting the farm, or participating in food production oneself is not only a desirable step in reaching a more sustainable lifestyle, it proves to be a powerful learning tool linking the customer to a world of other environmental and social issues.

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INTRODUCTION

1.0 BACKGROUND

The current zeitgeist of global interdependence has serious repercussions for societies and environments on a global scale. Food, as the central organizing principle of any species, is necessary for life. Every one of the approximately six billion people on earth must eat in order to survive. It is not hard to imagine, then, that the patterns of food consumption and production in the world have a very large impact on both the environments and societies to which they are tied.

In 1927, Charles Elton introduced the concepts of food chains and food cycles in his seminal book, *Animal Ecology*. In it, he identified the feeding relationships within biological communities as the central organizing principle (Elton 1927). This principle also applies to human communities. Food, as a human necessity, has led to the very rituals that established human existence as a social existence (Winson 1993). This deep relationship of food to the development of culture makes food an intrinsic part of society, and much more than a mere commodity. Yet today food has become a commodity - something that can be turned to a commercial advantage. The rituals and traditions that once supported the environmental sustainability, safety, accessibility, and cultural appropriateness of food have been largely undermined. This has led to the degradation of water, air, and land, as well as the collapse of rural communities. The 20th century, and especially the latter half, saw a drastic loss of healthy rural economies, and a transition from small-farm and local agricultural production, to an ever-increasing control of the food supply by large private corporations (Norberg-Hodge, Goering et al. 2001; Sumner 2005). The corporate concentration and control of our foodways, and concurrent

disempowerment of farmers, has created an unsustainable food system, led to food insecurity, and deep environmental and social injustices all over the world. The perceived abundance of foodstuffs in North American markets has never been greater, yet hunger and malnutrition in other parts of the world continue their skyward trajectory (FAO 2005).

Food security is the ability of all people to access nutritious, culturally appropriate, and safe food to meet their dietary needs and food preferences for an active and healthy life (FAO 2005). Communities around the world have lost, and are losing, their food security as it has become prey to the same social forces and economic laws that apply to other commodities. Yet it is no normal commodity (Winson 1993). As discussed, food is tied to our very being, and has a distinct relationship to social experience (Winson 1993). Its consumption and preparation play an essential and integrative role in human relationships (Winson 1993). For this reason, the types of food we consume, how, and where it was produced, have a large role to play in determining the sustainability of our society – in an economic, social/cultural and environmental sense.

The connections between environmental health and societal/individual health have led a growing number of Canadians to change their patterns of food consumption, searching out organic and local products instead of the conventional foods found in mainstream grocery stores (Doucette and Koroluk 2004). This has made the organic foods sector the fastest growing agricultural sector in Canada (AAFC 2003). Organic agriculture is a holistic food production system designed to optimize health, productivity, and encourage diversity in the agroecosystem in a manner that is sustainable and

harmonious with the environment (CGSB 1999; AAFC 2003). There is no use of synthetic pesticides, fertilisers, materials or products derived from genetic engineering, sewage sludge, hormones, antibiotics or other substances incongruent with the standard. The existence of persistent chemicals in the atmosphere, soil, and groundwater are recognized as being beyond the control of organic producers (CGSB 1999).

The shift to more sustainable forms of agriculture is necessary, and the growth of organic food consumption holds significant promise in creating a more sustainable society. This research views organic farming¹ as an example of resource management grounded in community and environmental sustainability, and looks at how it affects the learning of those who seek it out. The potential for wide ranging changes in individual behaviour, termed transformative learning outcomes, alongside a shift to a more sustainable food system, makes the growing consumption of organic within Canada a promising trend in sustainability.

1.1 PURPOSE AND OBJECTIVES

The proposed research falls within the larger field of inquiry concerned with fostering environmentally responsible decision-making by individuals and social institutions (Foley 1999; McDonald, Cervero et al. 1999; Leeuwis and Pyburn 2002; Keen, Brown et al. 2005). Informal education has a critical role to play in the transformation of individuals and social institutions to achieve a more environmentally sustainable society (Sinclair and Diduck 2001; Keen, Brown et al. 2005). My research

¹ The researcher acknowledges a recent (unsustainable) trend in large-scale corporate organic farming, and does not consider such large-scale farming congruent with the values and ethics behind organic practices: While I equate organic agriculture with sustainability – I am referring to a definition of organic agriculture that values local production for the local area, respects the land and its capacities to produce, and provides respect and a living wage to its employees.

explores the impacts of individual transformative learning on normative ideologies, and the potential for associated social impacts, related to organic farming. As such, it applies educational theory that promotes critical self-reflection as a means of improving the interconnections between humans, and the environment (Mezirow 1981; Merriam and Caffarella 1999; Keen, Brown et al. 2005).

The purpose of the research is to examine and understand learning among people who consume goods directly from local organic producers, and how this affects individual normative ideologies. By understanding how and why people choose to support or be involved in organic farming at a local level, I hoped to gain insight into individual transformative learning and how this contributes to a more sustainable society. Within this research context, I had the following five objectives:

1. Examine the individual learning associated with different models of organic producer/consumer interfaces;
2. Understand the reasons why people support organic producers;
3. Explore what this means in the transformation of individual normative ideologies;
4. Consider potential impacts of individual transformative learning on sustainability;
and
5. Communicate the findings to appropriate outlets within the organic and educational community.

1.2 SIGNIFICANCE OF RESEARCH

This project has scholarly significance for its potential contribution to transformative learning theory and associated social impacts, relating specifically to

routes to learning for sustainability. The research is original in that it explores the linkages between these learning theories and the fostering of a sustainable society by examining specific case studies of active participation in local organic agriculture as a route to learning. The case studies are situated within a Canadian context, resulting in relevant information for Canadian policy-makers. It also has practical importance given the speed with which the organic sector is growing. There is a recognized need for social research on organic farming (Macrae, Martin et al. 2002), and the Organic Agriculture Centre of Canada (OACC) has continually expanded their services to include research on issues such as the role of organics in community sustainability. There is relatively little research available on the subject, and particularly on associated social aspects (Macrae and Martin 2005; Sumner 2005). Organic farmers are being thrown into the realm of marketing, economics, and education (Macrae and Martin 2005; Selfa and Qazi 2005; Sumner 2005). Information that helps farmers to gain support for their organic products, reach a wider audience, and maintain successful community-oriented operations is needed.

1.3 METHODS

The project includes original field research within Canada, in the form of case studies. Three models of organic producer/consumer interfaces are considered: 1. the farmer and customer interact through sales at a farmers' market only, 2. the farmer actively provides education and outreach through a farm model, and 3. the interaction between the farmer and customers occurs through a community shared agriculture model.

The field research took place in Atlantic Canada. I chose the East Coast for a number of reasons, the most significant being I had contacts there that provided in-kind support for my research, and that there is a well-established, organic agriculture community with little distance to travel between producers. The three different farms I used as case studies are Elderberry Organic Farm, located in Valley, Prince Edward Island; the Falls Brook Centre, located near Knowlesville, New Brunswick; and Trilby Meadows Organic Farm and CSA, located in North Milton, Prince Edward Island.

The use of case studies as a strategy of inquiry was appropriate as it helped me to develop a deeper understanding of the place and actual experiences of the participants (Merriam 1998; Cresswell 2002), it valued process (Merriam 1998) and because it is well-suited to studies where the variables cannot be separated from their context (Yin 1994). I spent between three and four weeks working on each farm while collecting data. The data included both direct observations as a participant, through working on the farms and at farmers' markets, gaining first-hand experience with the customers; and face-to-face interviews which have allowed me insight into the customer's perspectives (Patton 1990). The data outcomes are qualitative, and I used data-analysis software (QSR Nvivo) to code themes and categories and thereby deepen the analysis (QSR 1999-2002). I have cross-checked and ensured the validity of my conclusions by employing multiple methods in my research: direct participant observation, face-to-face interviews with a range of participants, and data-analysis software.

1.4 THESIS ORGANISATION

The thesis is organized into 5 chapters. Following the introduction, Chapter 2 contains a literature review. The literature reviewed represents two major bodies of research: that surrounding environmental management and the related impacts of social policies (with a relative focus on organics and food systems); and literature related to learning, and specifically transformative learning. Chapter 3 houses the methods section, and Chapter 4 first presents the results of the research followed by discussion. Chapter 5 is the concluding chapter, containing a review and summary of the research.

HUMAN AND ENVIRONMENTAL HEALTH: LEARNING LINKAGES

2.0 FOOD: CENTRAL TO HUMAN EXISTENCE

Food is central to life. Every person on Earth must eat, creating a complex web of interactions that have a large impact on the economy, the environment, and society. Food is also intimately tied to the rituals that have maintained the human existence as a social one for millennia (Winson 1993; Nabhan 1997). However, the way our North American society conceptualizes food today (largely a result of imposed food systems) has resulted in the debasing and commoditization of food. The literature surrounding today's food-systems identifies two distinct and unequal systems based on competing values, differential socioeconomic and biophysical impacts, and an imbalance in power relations (Jarosz 2000; McMichael 2000; Lange 2004; Sumner 2005). These competing paradigms: the productionist/life sciences paradigm and the ecological paradigm (Lange 2004), or as referred to by Sumner (2005c) the money-code of value, and the life-code of value, must fight it out in an ever-increasingly globalised world. Throughout my thesis I will refer to these disparate systems as conventional agriculture, and sustainable agriculture (organics). I recognize that both are on a continuum in that conventional agriculture could represent anything from the small family farm to large-scale corporate industrial farms, and that large-scale corporate farm models have also begun to compete with small organic farms. When appropriate, I have tried to clearly quantify the level and type of farming being discussed.

The commoditization of food and the transition from agri-culture to agri-business, is altering not only our biological communities, but the attendant patterns of social organization. In North America some link the change in our food systems with

industrialization – when food became removed from its ecological and cultural ties, and became an input, or a commodity, in urban diets and industrial processing plants (McMichael 2000). However, the roots of commoditization go back even further for some food products such as coffee, tied to unsustainable practices since at least the 15th century when the Dutch enslaved the natives of Suriname to grow coffee (Dicum and Luttinger 1999). Although the foods and issues have changed over time, many argue that the underlying paradigm is no different today (Paige 1997). The poor countries are still tied up in a struggle of inequity between themselves and the rich nations and transnational corporations (TNCs) who control the capital and reap the economic benefits of the poor nation's resources (Roseberry 1983). While domination was once related to conquest and colonization, today it is related to the project of economic globalisation through trade, investment, and debt.

Within Canada, the past century has seen a complete alteration of the foodscape. The forces now shaping it are related to profit-making (Winson 2004). This has meant a drastic loss of healthy rural economies, and a transition from small-farm and local agricultural production, to an ever-increasing control of the food supply by large private corporations (Kneen 1999; Norberg-Hodge, Goering et al. 2001; Qualman and Tait 2004; Sumner 2005). This transition has been paralleled on a global scale as well. Our current food system is unsustainable, leading to food insecurity, and deep environmental and social injustices all over the world (Duram 2005). The alteration of our most fundamental system, and central organizing principle, has produced shockwaves that have forever changed our social and biological communities.

There is, however, a growing countermovement to the unsustainable pathways of our conventional food system. Referred to as counter-hegemonic by (Mündel 2007), it can be witnessed in community supported and local sustainable agriculture, community food security coalitions, organic food, principles of bio-diversity, vegetarianism, bioregionalism, fair-trade movements, and the slow-food movement for example (McMichael 2000). As McMichael (2000:32) points out, for most of the people in the world:

...food is not just an item of consumption; it's actually a way of life. It has deep material and symbolic power. And because it embodies the links between nature, human survival and health, culture and livelihood, it will, and has already, become a focus of contention and resistance to a corporate takeover of life itself.

2.1 OVERVIEW OF CONVENTIONAL FOOD SYSTEM

During the twentieth century, and especially within the last twenty-five years, the food supply has become steadily more integrated and globalized. The origins of this shift began in World War Two, with the development of mass production facilities for packaging, and storing food for transportation and extended periods of time, in more efficient ways than had existed before. The Bretton Woods Conference held in July of 1944, at the end of WWII, played a significant role in leading to globalization and trade liberalization in that it laid the foundation of the trade regime with the General Agreement on Tariffs and Trade (GATT), and the establishment of the International Bank for Reconstruction and Development, and the International Monetary Fund. At eleven-trillion dollars a year, international trade flows and their governing rules and institutions, have become an overwhelmingly powerful force for economic, environmental and social change – both positive and negative (UNEP and IISD 2005). Interdependent factors,

including the globalization of our food supply focused on trade liberalization and export-led economic growth; introduction of genetic engineering technology; loss of local farmers and foods; and loss of biological diversity, and thereby system resilience, negatively impact the sustainability of our food system.

2.1.1 Trade Liberalization

The most prominent characteristic of globalization is trade liberalization, a central part of mainstream policy advice for the last twenty-five years (Mculloch, Winters et al. 2000). It is the opening of borders to freer trade, and the removal of any “distorting” factors to trade such as tariffs, subsidies, and other forms of protection. Agriculture is considered the most trade-distorted market sector (Mculloch, Winters et al. 2000), and the global trade institutions have focused their efforts on agricultural reform (McMichael 2000). This has resulted in initiatives such as cuts to government spending, the threat of tariffs to prevent domestic investment in certain products, and heavy regulation by the World Trade Organization. This has had a direct effect on farmers, their culture, and environments around the world (McMichael 2000; Sumner 2005).

The underpinning of these changes is an economic system focused on continued growth and therefore increased production. In agriculture this has translated into a shift from local markets to global export markets, and in most cases resulted in bigger farms. The development of ever larger farms in response to the pressures to increase yields for export, and to compete in a commodity market that forces out small farmers, has meant a shift away from small family farms to land consolidation and the growing of monocultures. These large farms are possible, not because they are more efficient than small family farms, but because they are directly and indirectly subsidized through

government policy (McMichael 2000; Norberg-Hodge, Merrifield et al. 2002). Large subsidies (based on productive land) make it possible for corporations to make a profit, even if they sell their goods below the price of production (Norberg-Hodge, Merrifield et al. 2002). When they do, commodity prices drop to levels that make it impossible for small farmers to compete in global markets. The concentration of wealth within TNCs is made possible, in part, through these efforts directed at trade liberalization.

The scenario of a fully globalized food system is undoubtedly far fetched....Nevertheless, the reality is that full implementation of a WTO regime would be tremendously destabilizing to the remaining three billion people who live from the land, would intensify environmental jeopardy (especially with the growing threat of biological, rather than simply chemical pollution), and would continue the process of reducing global biodiversity to agroindustrial monocultures and thence greater vulnerability of crops and livestock, (McMichael, 2000:26)

Of the one-hundred largest economies in the world, fifty-one are corporations (Anderson and Cavanagh 2000) and their level of accountability to the local community is questionable. The richest twenty-percent of the world's population account for eighty-six-percent of global gross domestic product (GDP), while the poorest twenty-percent account for just one-percent (Lang and Heasman 2004). Based on a twenty-year survey of the literature around corporate globalization, Sumner (2005:304) concluded this process had an "overwhelmingly negative economic, social, political, cultural, environmental, and gender-based impact on rural communities." Under the conditions that trade liberalization necessitates:

....agriculture becomes less and less an anchor of societies, states, and cultures, and more and more a tenuous component of corporate global sourcing strategies. It increasingly anchors a system of global profiteering in food products, a system in which food travels from farm gate to dinner plate an average of two thousand miles. Transnational corporations stand to gain overall from a free trade regime, since it enhances and rewards

capital mobility and facilitates it by reducing institutionalized costs, (McMichael, 2000:23).

2.1.2 Genetic Engineering Technology

Concurrent with economic trade liberalization policies described above are changing agricultural methodologies. Growing food on the large scale necessary for global distribution creates monocultures with such simplified ecosystems that they are left fragile and prone to disease infestations and pest outbreaks. Monocultures create suitable niches for pests in three ways: insects are able to develop a quick resistance to pesticides because of their short lifecycles, there is a loss of natural enemies caused by use of broad spectrum insecticides, and there is a high availability of food because of continuous mono-cropping. Without letting the soil rest, as rotational cropping once did, means that nutrients are not rebuilt, and without a healthy soil, the food itself is lower in nutrients (Norberg-Hodge, Goering et al. 2001). Huge inputs of external fertilizers, herbicides, and pesticides are the only way to maintain the large-scale conventional agricultural system (Qualman and Tait 2004). This type of agriculture creates self destructive farm systems.

Genetic engineering, “the deliberate reconstruction of living organisms to create novel life forms for commercial purposes,” (Kneen, 1999:5) is a recent development in the history of agriculture. The same corporations that made their fortunes on chemicals - Cargill, Monsanto, Cyngenta, Novartis, etc. - are now developing “Life Sciences” Technology, as an ecologically sound way to reduce farmer’s reliance on pesticides and fertilizers, and with the promise of feeding the world. Canadian Organic Growers echoes the general argument against genetically engineered (GE) foods when they state that the

research on the health and environmental safety of these foods has been inadequate (COG 2005). Critics worry that the use of GE will create super-weeds and pests that will be resistant to conventional methods of intervention, thereby requiring more chemical inputs (Kneen 1999; Palfreman 2001). They also cite the risk of crossbreeding with non-modified plants, leading to gene pollution, loss of access to markets that prohibit GE foods, and reduction of the variety available in the gene pool (UNEP and IISD 2005). In 2002, African countries refused food aid in the form of unmilled genetically modified corn from the U.S. for fear of cross-contamination of their traditional varieties, despite the loom of famine (UNEP and IISD 2005).

Almost seventy-percent of processed foods in Canada contain GE ingredients (Barstow 2002). Without mandatory labeling of GE foods in Canada, we have no way of knowing whether our food has been altered.

The public is misled by the myth that GE is necessary to feed the world. Numerous other agricultural systems are used successfully and sustainably around the world, including organic agriculture, permaculture, and agroecology (Norberg-Hodge, Goering et al. 2001; Lang and Heasman 2004; Duram 2005; Sumner 2005). A recent study of two-hundred and eighty-six sustainable agriculture projects in fifty-seven developing countries found that yields actually increased with the reduction of pesticides and fertilizers in almost all cases. Their conclusion was that sustainable agriculture is more efficient (Pretty, Noble et al. 2006) and better suits the needs of countries struggling with hunger and poverty.

2.1.3 Loss of Local Farmers and Foods

The loss of local farmers and local foods is directly tied to the economic pathway our current society is set upon. In what Qualman and Wiebe (2002:1) call the structural adjustment of Canadian agriculture: “an increased focus on production for export, cuts to government spending, deregulation, increased foreign investment, privatization, removal of subsidies and other supports, and the adoption of a free-floating currency,” there has been the acceleration of “the transfer of wealth from local producers to transnational corporations.” This has resulted in a twenty-two percent loss of farms in Canada between 1981 and 2001 (with eleven percent of those losses taking place between 1996 and 2001) (Qualman and Wiebe 2002). In order to compete in the current environment, where realized net farm income is at 1930s levels despite a more than seven-fold increase in agri-food exports, farmers have to borrow money. Farm debt at the end of 2001 was \$40.8 billion dollars – a fifty percent increase since 1996 (Qualman and Wiebe 2002).

How did we allow something so central to our society to become commoditized and removed from our control? One researcher points out that the agricultural discourse in North America changed distinctly after WWII, (Mariola 2005). Prior to that, “agrarian writers conceived of farming as a rewarding life, a public good, and a source of moral virtue, current writers on farmland preservation speak of farming almost entirely in utilitarian terms describing its productive capacity and its economic returns” (Mariola, 209).

North Americans now spend one half their food-budgets, and receive at least one third of their caloric requirements outside the home (Winson, 2004: 301). Multinational fast-food chains, who are meeting a large part of this demand, are prominent in

promoting high-fat, high energy diets through advertising campaigns, super sized portions, and their omnipresence in the foodscape. The food sector spends more on advertising than any other major sector, with the bulk of it being spent by those producing high-fat, high-sugar, highly processed and packaged foods (Winson 2004).

The associated costs have been great. Not only has it resulted in the loss of farmers and local foods, but this dietary transformation has happened quickly, leaving humans little time to adapt physiologically to the impacts of such a diet. Coupled with a decline in physical labour, these rapid changes have resulted in increased obesity and overweight adults and children (Winson 2004), increased illnesses and other public health concerns such as heart disease (Lilliston and Cummins 1998), food additives linked to the prevalence of certain diseases, and a general loss of culinary skills (Lang and Heasman 2004).

These undermining situations have resulted in what have been their greatest impacts: on livelihoods and societies around the world, as well as on their environments. The benefits of growth have been unevenly spread, resulting in a huge polarization of wealth. "The growing inequality between and within nations shows no signs of abating" (UNEP & IISD 2005:1). On a global scale, half a billion rural people lack access to land on which to grow food largely because of the agro-export bias, and a substantial amount of the food that is commercially produced supplies our unsustainable diets (McMichael, 2000:26). More people live in poverty today than ever before. One fifth of the world's population, approximately 1.3 billion, live on less than USD \$1 per day (Lang and Heasman 2004). The bulk of these people live in South and East Asia, and Sub-Saharan Africa. Hand in hand with poverty is an increased risk of health-related illnesses, and

exposure to environmental hazards such as polluted food, water, and air (Lang and Heasman 2004). The majority of the world's poor, are farmers (Weins 2005).

At least seventy-percent of the population in developing countries depend directly or indirectly on agriculture (UNEP and IISD 2005). It could more realistically be said that the majority of people in the world depend directly or indirectly on agriculture, as we all need to eat. In rich countries, globalization of the food supply has brought the availability of the year-round orange or pineapple, introduced persimmons, lemongrass, durians, mangoes, and numerous other tropical and exotic treats. This availability of exotic food has given us an expansion in food choices which we relate to a perceived expansion in diversity. But production for the global market actually precludes diversity. Instead of growing a variety of local foods favoured by the local conditions, foods grown are favoured for the global marketing system and are artificially supported in areas where they would not naturally grow, through external inputs. Chosen for uniform shapes, extended shelf-life, and ability to withstand long-distance transport, these global commodity foods are grown around the world, replacing diverse, locally-adapted varieties by the thousands (Norberg-Hodge, Merrifield et al. 2002). And so, while local varieties dwindle (along with their cultivators), the people poised to have the most powerful voice – the consumers of the rich countries – have no idea what is going on as there is more choice in the grocery stores than ever before.

2.1.4 Loss of Biodiversity

With its significant environmental impacts, conventional agriculture is also heavily subsidized by the commons. Irrigation of crops, run-off and seepage of pesticides and manure affect the water supply; the transport of produce and animals, and

grain to feed the animals, affect the air we all breathe; the erosion of topsoil due to tillage, monocropping and removal of natural biomass affects the health of the soil, the nutrition of our food, and the water; the packaging of processed foods creates a legacy of waste and pollution we will be dealing with for the rest of our lives; and the stripping of land in some of the most biodiverse areas of the tropics in order to plant cash crops for export affects a whole range of ecosystem functions.

Local food systems have, by nature, high levels of diversity. This is the result of local farmers carefully selecting seeds over many years for success in the local microclimate and soil type (Nabhan 1997). In direct relation to differences in climate, geography, and natural resources, local foods tend to differ from place to place. Cultivation methods also differ based on ecological and cultural conditions (Norberg-Hodge, Merrifield et al. 2002). Local varieties protect system diversity through their local adaptations. Small-scale farms, particularly organic ones, allow a number of non-food species to exist in the agroecosystem through the maintenance of hedgerows, woodlots, pastures, and fallow lands. These nurturing habitats help to maintain the overall biodiversity of the region (Norberg-Hodge, Merrifield et al. 2002). In areas where local farmers supply much of the food, there is incentive for them to diversify production. This diversity not only provides the food for the surrounding community, it provides an ecological service by protecting biodiversity and increasing the system resilience.

Resiliency is the ability of a system to absorb shocks and change and to recover after a disturbance (Berkes, Colding et al. 2000). The simpler the ecosystem, the more susceptible it is to disease and infestations, and the less able it is to absorb change. This

has implications for the ability of our food systems to adapt to climate change, and relates to our food security directly. In our current system, we have reduced the varieties of produce grown, developed our best agricultural land into urban areas, and switched the remaining agricultural land over to cash-crop monocultures. Food scares have become more common in the last few years, and are often caused by our impact on the health and resilience of the world's ecosystems.

Organic farmers are not (nor am I), calling for a return to completely local food systems. Floods, droughts, and a host of natural disasters can wipe out entire local-food systems, so some integration with outside food economies is desirable. However, for the same reason, exclusive reliance on an outside food supply is just as dangerous. With the expected increase in unpredictable weather and related natural disasters due to climate change (IPCC 2007) the benefits of re-localizing our food systems are multiple. The production of greenhouse gasses (GHGs) from fossil fuels currently supporting the conventional food system will be reduced, while the resiliency of the more diverse and proximal food-systems will be increased through more local food systems. In the face of potentialities related to climate change, such as a breakdown in transportation, a localized food system will provide a safety net for communities who currently rely almost exclusively on the global food system.

The knowledge needed to restore diverse rural and agricultural communities is lost as we come to rely on the conventional food system. The narrow focus on export commodities in the global food system, if adopted by farmers, erodes the knowledge of how to cultivate local indigenous species. "Preserving genetic traits without preserving

the knowledge of their husbandry may prove futile as the seeds and clones stored in seed banks do not carry the instructions on how to grow them” (World Bank 1998:7).

Moving away from locally sustainable food systems can also have profound impacts that spread beyond technical knowledge of local food production. One researcher, looking into the travels of a Mexican tomato stated: “with this loss of control comes a spiritual loss, and a loss of a knowledge of seeds, of organic fertilizers and pesticides, of sustainable practices such as crop rotation or leaving the land fallow for a year – practices that had maintained the land for millennia,” (Barndt 1997:61-62).

Many researchers have found that there is a direct link between the maintenance of culture, and that of biodiversity (Nabhan 1997; Turner, Ignace et al. 2000). In areas where culture is found most intact, so is biodiversity (Nabhan 1997). The literature shows that this hinges on a link between the maintenance of diversity and the maintenance of wild food sources (Berkes, Colding et al. 2000; Turner, Ignace et al. 2000). Within Canada, First Nations have managed ecosystems for thousands of years for genetic diversity and to provide a plethora of local edible foods such as mandomiin (wild rice), or the clam gardens of the West Coast (Turner and Jones 2000). This reinforces the idea that food is central to the health of a community through maintaining not just the social connections, but also by promoting sustainability.

That said, it is desirable that adults begin to make more environmentally responsible decisions. The growing resistance to the downfalls of conventional agriculture, as exemplified by the organic agriculture movement, can be used as a point of departure to examine the learning of adults surrounding the food system and how it can lead to a more progressive worldview. Local organic agriculture is a form of

sustainable agriculture that could revitalize rural communities, recreate healthy social connections, and empower adults to make progressive choices in their lives that lead to a more sustainable future for Canada.

2.2 ORGANIC AGRICULTURE

The groundswell of people involved in this countermovement, have established that the conventional food system is unsustainable, and are building networks to promote agriculture on a smaller scale, and in a more diversified and ecologically sound manner (Norberg-Hodge, Merrifield et al. 2002). The movement favours foods grown locally, rather than mass-produced thousands of kilometers away. The presence of this movement is seen in the ever-increasing demand for organic and fair-trade foods, the rebirth of Farmer's Markets, and the zeal with which farmers and activists around the world are developing learning cultures around sustainable agriculture. It is found in Italy's slow-food movement, or Toronto's Foodshare, or in the appearance of small organic distributors in urban areas. As Vandana Shiva said in a recent interview:

I feel that a big shift is taking place right now and that the potential for change is great. People are not arguing endlessly over texts...people are experiencing another life. The tiniest organic farms, and the smallest food distribution centres for the poor are creating another experience that has more conviction than a thousand books and a thousand manifestos (Miller, 2005:14).

Organic agriculture is a holistic system of production that is designed to optimize productivity and diversity in the agro-ecosystem in a manner that is sustainable and harmonious with the environment. It is free of chemical inputs such as synthetic fertilizers and pesticides, materials or products that have been genetically engineered, sewage sludge, hormones, and antibiotics. This approach to agriculture, on top of being

an integrated food production system, also sustains farm families and rural communities by providing more just economic returns, and promoting community interaction and interdependencies (Duram 2005; Sumner 2005).

The principles of organic agriculture are captured well by the International Federation of Organic Agriculture Movements (IFOAM), founded in 1972, and which today has more than 750 member organizations in 108 countries (Godfrey 2006). The four principles developed by IFOAM, and as summarized by Godfrey (2006:57) are as follows: 1) Health – Organic agriculture should sustain and enhance the health of the soil, plant, animal, human and planet as one and indivisible; 2) Ecology – Organic agriculture should be based on living ecological systems and cycles, work with them, emulate them, and help sustain them; 3) Fairness – Organic agriculture should build on relationships that ensure fairness with regard to the common environment and life opportunities, and; 4) Care – Organic agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment. “IFOAM’s mission is leading, uniting, and assisting the organic movement in its full diversity. Our goal is the worldwide adoption of ecologically, socially, and economically sound systems that are based on the principles of organic agriculture” (IFOAM 2005). IFOAM has taken notable steps in trying to define the relationship of organic certification to the social element of sustainability by adopting a chapter on social justice for its basic standards that must be met for certification (Shreck, Getz et al. 2007). Organic certification is a system of regulations that are designed to ensure consumers, through the use of a logo, that the Canadian and/or international standard of quality is being met.

Though my argument is that organic food is a more sustainable system of agriculture, it is not to say that all organic agriculture is socially and economically equitable. Shreck *et al* (2007:446) point out that there “is a general perception that organic agriculture is more socially sustainable than conventional agriculture.” However their research findings showed them that not all organic farmers (in a Californian context) were fully supportive of social certification. They argue, as a result, that “to empower farm workers and to create production conditions that are favourable to a broader conception of social justice, change is needed in the agro-food system as a whole, not just at the point of production,” (2007: 447). This would lead us to an agriculture that is “characterized by a truly comprehensive definition of sustainability; an agriculture that is ecologically sound, economically viable, and socially responsible,” (Shreck *et al*, 2007:448).

As a countermovement, organic agriculture has partly come out of a desire for a food system based on an ethic that supports a holistic view of economic, environmental, and social sustainability. Sumner eloquently defined the ideal sustainable agriculture as one that would:

...promote the civil commons, not the profit margins of an elite group, as the key to individual and community well-being – protecting and enabling universal access to the life goods of food and fiber. Sustainable agriculture would no longer be conflated with the spread of industrialized agriculture and the subsidization of large corporate players, but would include the dedicated support of small farms that provide meaningful employment, contribute to the local food supply, and steward the environment. Sustainable agriculture would also mean the active participation of those involved in all aspects of the food and agricultural system, so they could work together to build the co-operative human constructions that make up the civil commons. Rather than being urban-centered and globally oriented, such agriculture would be community-based, bringing new primacy and vitality to rural areas. And like sustainability itself, sustainable agriculture would be multi-scalar – moving from the local

through national policy formation to international treaties. Unlike industrial agriculture, which is linked to vertically and horizontally integrated, transnational corporations, sustainable agriculture would help to globalize the civil commons, not the rights of huge transnational corporations. (Sumner, 2005c:309).

2.2.1 The Organic Agriculture Sector in Canada

The organic foods sector is the fastest growing agricultural sector in Canada (AAFC 2003). Canada's large and varied land base make it an ideal place for growing organic products, while its cooler climate serves to reduce pest and disease problems (AAFC 2003; CFIA 2005).

In 2001 the Census of Agriculture reported 2,230 certified organic producers, working 340,000 hectares of land (AAFC 2003). The most recent data available from 2005 show 3,618 certified organic producers working 530,919 hectares of land (1.3 million acres), (Macey 2006)– forty percent more producers, working thirty-six percent more land in only three years. This is not to mention the additional 123,529 hectares of certified organic wildlands acreage, and a known 47,955 hectares that are currently in transition (Macey 2006). These numbers represent only farms that are certified organic – there exist many more that choose not to certify, but still produce organically. Saskatchewan and Quebec are the Canadian provinces with the highest growth rates and highest numbers of producers. An increase in producers necessitates an increase in processors and handlers, and they experienced a forty-eight-percent increase between 2003 and 2004 (Macey 2006).

The organics market is exploding in Canada, with a demonstrated twenty-percent annual growth in the retail sector over the last twelve years (AAFC 2003; Macey 2006). This ever-increasing demand for such products within Canada has led many struggling

farmers to turn towards transitioning to organics in order to hold onto the family farm (COG 2005). Canadian organic retail sales were projected to reach \$3.1 billion in 2005, sixteen-percent of the global sales estimate (CFIA 2005). Five-percent of fruit and vegetable farms in Canada consider themselves organic, and Canada is among the top five producers of organic grains and oilseeds (AAFC 2003). The production of organic livestock is increasing rapidly to try and meet demand. Within one year, "from 2004-2005, the beef herd increased by 30%, sheep numbers by 19%, layers by 20%, and broilers by 56%," (COG 2007). Canada currently imports eighty-five-percent of our organic products (Drake 2001), a number that Canadian farmers hope to reduce.

Recently, the Canadian government developed a National Organic Standard, in order to meet the Dec. 31st, 2006 European Union third-country equivalence list deadline for national organic production systems (CFIA 2005). The Standard was developed with input from all stakeholders, including both small farmers and agro-industry. The standard was published in the Canada Gazette as "Organic Products Regulations" on December 21st, 2006. There is a two year implementation period for the new regulations which will apply to any multi-ingredient organic products (the contents of which are at least ninety-five percent organic), and organic products that are marketed in interprovincial or international trade. They will bear the logo "Canada Organic." Organic products imported from outside of Canada must also meet the standard and will bear the same logo. Accreditation of organic certification bodies will now be administered federally through the Canadian Food Inspection Agency (CFIA).

2.2.2 Corporate Organic Interest

With such a sustained growth rate, the organic sector is gaining attention outside of its traditional supporters. Large agri-business corporations have been quick to notice the trend and have begun to develop their own organics lines of products. Maintaining the integrity of the organic certification process has been difficult to date, and promises to become even more challenging as large corporations expand into this lucrative market. As large corporations enter the sector they push for more flexibility in the food additive standards. Many people turned to organic in the first place to avoid these food additives. Large corporations have, in effect, separated the ethics and values integral to the organic movement from the more instrumental side and technical requirements of organic. They may technically meet the requirements of an organic standard, but they do not embody the ethics of sustainability behind organic.

2.2.3 Why People Buy Organic

People choose to purchase organic for a variety of reasons. The literature identifies a number of motivating factors, including the idea of sustaining the future, preventing soil erosion, protecting water quality, saving energy, preventing the ingestion of chemicals, protecting the health of farm workers, promoting biodiversity, superior taste and freshness, supporting the local economy, helping small farmers, and reducing the overall impact on the earth. McMichael (2000:31), suggests that more consumers and parents are becoming aware of the shortcomings of industrial food, and cites Lilliston and Cummins (1998:196) who bring home the point: "routinely contained in nearly every bite or swallow of non-organic industrial food are antibiotics and other animal drug residues, pathogens, feces, chemicals, toxic sludge, rendered animal protein, genetically modified

organisms, chemical additives, irradiation-derived radiolytic chemical by-products, and a host of other hazardous allergens and toxins.”

2.2.4 Alternative Marketing Practices

A number of alternative marketing practices such as fair trade products, farmers’ markets, and community shared agriculture (CSA) have developed in order to circumvent the conventional food system and provide an alternative choice.

Fair trade is an organized social movement that promotes fair trade certification of products that are produced in developing countries and exported to richer countries such as North America. Certification assures the customer that the product was produced according to equitable labour, environmental, and social standards. The goal is to provide a just income for producers in developing countries, helping them to attain economic self-sufficiency, greater security, and equity in international trade.

Farmers’ markets and CSAs are marketing methods that have the potential to provide increased self-sufficiency to producers, increase local food security by providing fresh local food to consumers, and offer environmental benefits by reducing the distance that food travels (Doucette and Koroluk 2004). Farmers’ markets are community spaces where local and regional producers of a range of products can get together at a set time to market their goods. Markets are generally vibrant, enjoyable social settings for the consumer also, with a chance to meet growers, and to interact with neighbours. One need not look far within Canada to see the reintroduction of Farmer’s markets in towns across the country.

A CSA on the other hand, is a partnership between a producing farmer, and a group of members. The members of the CSA, purchase a share of the farm’s harvest on

an annual basis. By purchasing their share ahead of time, they provide the farmer with the operating capital he/she needs for the season, and guarantee an income. It also means that the members share in the risks and benefits of farming, and that they know where their food comes from (Doucette and Koroluk 2004).

2.3 TRANSFORMATIVE LEARNING

Just as I have suggested that food is central to life, others have suggested that learning is central to life (Foley 2004). As humanity's primary mode of adaptation, learning plays a key role in the perspectives people hold and the meaning they give their experiences. Learning can be defined simply as the act or process of acquiring knowledge or skill (Barnhart and Stein 1959). Learning plays a vital role in providing solutions to the problems and pathologies of our current social paradigm.

Transformative learning is related to learning that produces change. It is a process of adult learning that produces more far-reaching changes in the learner than does learning in general, impacting the learner's subsequent experiences. In a time when our patterns of behaviour and consumption in North America are having detrimental effects on the global environment, there have been many calls for a new ethic of sustainability. However, the adoption of a more sustainable lifestyle in North America will require a fundamental shift in our values and the way we enact them. Adult learning has an important role in creating this change. Transformative learning then, is relevant to the future of environmental decision-making and sustainable development as it develops autonomous thinking in adults which is necessary for full participation in democracy and for making morally sound decisions in situations of rapid change (Mezirow 1997).

Feeling empowered over life's decisions, through meaningful participation in the civil commons is "conducive to broad-based individual and social learning that could enable the transition to sustainability," (Sinclair and Diduck 2005).

Interest in adult learning as a field of inquiry has steadily grown since 1928 when the first research on adult learning was published (Thorndike, Bregman et al. 1928). Much of the literature surrounding this field is in the realm of trying to understand the process of how adults acquire, process, and utilize new knowledge (Merriam 1993). Adult learning, is very contextually grounded; experience, personal history, social and cultural contexts all must be considered. Because knowledge only exists in relation to a particular social context and particular values, I have previously laid out the context in which I am framing this research in the overview of the conventional food system (section 2.1). Similarly, transformative learning is also contextually based. In a recent article Mezirow outlined a number of common contexts for transformative learning which included: popular education, social action, community, and social movements (Dirkx, Mezirow et al. 2006). The key to transformative learning is the ability to critically reflect on personal beliefs, assumptions, values and actions, as well as on those of others (Mezirow and Associates 1990). Critical reflection may eventually necessitate a relationship of dialogue in which the learner can voice and discuss their thought process and receive feedback, thereby influencing others and being influenced simultaneously. Mezirow (1994) has said that most reflection takes place within the context of problem solving. What our society faces, in terms of protecting the environment and reversing our detrimental impacts so our species may survive happily in the long term, is one of the biggest disorienting dilemmas it has ever seen. It is also perhaps one of the greatest

learning opportunities in consciousness raising with the last forty years (Hart 1990). For this reason, transformative learning is a very useful theory to employ when considering how to foster a more sustainable future for our society, and consequently that of the global community.

2.3.1 Transformative Learning: A theory in progress

In 1978 Jack Mezirow published his first paper on “perspective transformation,” and has since developed the theory more extensively in various writings. His work is theoretical, with the purpose of creating a comprehensive theory of adult learning (Mezirow 1991). Mezirow (1997:7) identifies four processes of adult learning 1) elaborate an existing point of view, 2) establish new points of view, 3) transform our point of view (meaning scheme), 4) transform our habit of mind (meaning perspective). At the centre of transformative learning theory is the structuring of meaning from experience. This can lead to the process of affecting change in a frame of reference (meaning perspective). Frames of reference are the lens through which we see the world as adults: our worldviews. As defined by Mezirow (1997:5) frames of reference contain “structures and assumptions through which we understand our experiences,” and are “primarily the result of cultural assimilation and the idiosyncratic influences of primary caregivers.” While most of these perspectives are uncritically acquired through socialization, some, such as ecofeminism, are intentionally learned (Mezirow and Associates 1990).

Integral to the transformative learning process is:

...becoming critically aware of how and why our presuppositions have come to constrain the way we understand, perceive, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective, and of making

decisions or otherwise acting upon these new understandings. More inclusive, discriminating, permeable, and integrative perspectives are superior perspectives that adults choose if they can because they are motivated to understand the meaning of their existence,” (Mezirow, 1981:11).

Transformative learning is a normal part of adult life that is intimately connected to the developmental process. In fact, Mezirow identifies the process of perspective transformation as the central process of adult development (1991:55).

When applied to social outcomes, Mezirow’s model represents incremental change as opposed to revolutionary change, being that it is affected person by person. On an individual level, Mezirow’s transformative learning process can take place gradually or it can be rapid. In most cases, it is associated with informal learning which occurs when people consciously try to learn from the experiences of their everyday life through individual or group reflection and dialogue (Foley 2004). The transformative learning process begins with the learner being confronted by a “disorienting dilemma” which leads him or her to critically reflect on their underlying meaning schemes. Transforming numerous meaning schemes could lead to an accretion that causes a perspective transformation – or the perspective transformation could be all-encompassing given the nature of the disorienting dilemma such as a major life event. Personal perspective transformations can cause changes in an individual’s behaviour that leads them to have a different impact on their surrounding physical, emotional or social environment than they previously had. This is how transformative learning, although individual, can translate into broader social change.

Mezirow has outlined eleven phases to the transformative learning process (Mezirow 1994):

- 1) A disorienting dilemma
- 2) Self-examination with feelings of guilt or shame sometimes turning to religion for support
- 3) A critical assessment of assumptions
- 4) Recognition that one's discontent and the process of transformation are shared and others have negotiated a similar change
- 5) Exploration of options for new roles, relationships, and actions
- 6) Planning a course of action
- 7) Acquiring knowledge and skills for implementing one's plans
- 8) Provisionally trying out new roles
- 9) Renegotiating relationships and negotiating new relationships
- 10) Building competence and self-confidence in new roles and relationships
- 11) A reintegration into one's life on the basis of conditions dictated by one's new perspective (Mezirow, 1994:224).

While Mezirow has clearly outlined this process – he also points out that his theory is meant to be comprehensive and idealized – how it plays out in actuality is dependant upon the context (Mezirow, 1994). The transformation of meaning structures is not linear, and it has been disputed by many of Mezirow's colleagues. Mezirow has always been quick to address misconceptions about his theory, or to adapt it to accommodate new ideas and research, hence my reference to it being a theory in progress.

2.3.2 Transformative Learning: Relationship to critical theory

Underlying Mezirow's theory are a number of philosophical assumptions: a humanistic understanding of the person in that all people are capable of change, and free to act on the world; a constructivist or interpretist theory of knowledge that views knowledge as a socio-cultural construction rather than a discoverable truth (Mezirow 1994); and a presupposition of a democratic vision of society where autonomous individuals are responsible for their collective futures (Clark 1993). Many of these ideas derive their roots from critical social theory. The objective of critical theory is to uncover the oppressive forces acting within a given social context and to empower people to individually and collectively change the oppressive conditions in their lives (Merriam

1993). In the context of agricultural sustainability, the current economic structures that maintain and facilitate the debasement of environment and culture in the name of corporate profit, as described above, could be seen as the oppressive framework within which society lives.

Although some have argued that the role of power in transformative learning theory is unclear or undefined (McDonald, Cervero et al. 1999), it is a theory that draws its roots in part from a body of literature that is very concerned with power dynamics: i.e. Paulo Friere. I feel that given the contextual differences experienced by adult learners, the role of power must be undefined; it is not however, absent. Transformative learning theory is shaped by the very fundamental idea of empowerment through becoming a critical thinker. A critical thinker gains the power of knowledge and insight brought about by analysis of his or her condition (whether within their personal life, or on an organizational or societal level). This enables the individual learner to act on their new perspective in both an individual and social context if they so choose.

Mezirow's writings are philosophically grounded in those of Jürgen Habermas, the German critical theorist. Habermas elucidated three different forms of knowledge: technical, practical, and emancipatory (Habermas 1972). He explained how problem-solving and learning may be: instrumental, impressionistic, normative, or communicative (Habermas 1981). Communicative learning involves understanding purposes, values, beliefs, intentions, and feelings that stem from underlying assumptions. This is reflected in transformative learning theory because in order to do this, learners must become critically reflective (Mezirow 1997). In doing so, the learner must engage in discourse with at least one other person in order to "reach an understanding of the meaning of an

interpretation or the justification for a belief....We engage in discourse to validate what is being communicated,” (Mezirow, 1997:6). In this way, learning is a social process, and discourse is central to making meaning. Mezirow defines discourse as dialogue devoted to “assessing reasons presented in support of competing interpretations by critically examining evidence, arguments, and alternative points of view,” (Mezirow, 1997:6). Mezirow (1985) outlined a series of ideal conditions for discourse, that he also later identified as the ideal conditions of adult learning and of education in general (Mezirow 1997). These conditions include full information, freedom from coercion, equal opportunity to participate, being empathetic and open to other’s perspectives, willing to listen and search for common good, ability to make a tentative best judgment to guide action, and the ability to be critically reflective of assumptions (Mezirow, 1997:10).

Habermas’ description of communicative learning provides an ideal standard for those committed to emancipatory education practice. While Habermas articulated a much more radical social theory than Mezirow, it is not fair to say that Mezirow does not deal with the social aspects of transformation. Mezirow argues that meaning exists within ourselves, (Mezirow 1991), and resultantly individual perspective transformations are necessary before social transformations, resulting in broader social change, will be successful (Mezirow and Associates 1990). It is also possible that social transformation could lead to individual transformations. However, even social transformations are sparked by a group of individuals at some point.

Mezirow was also greatly influenced by the work of Paulo (Freire 1970). Parallels can be drawn between transformative learning theory and Friere’s theory of conscientization. Friere’s theory is a combination of action and reflection, or praxis. It is

based on identification and critical awareness of oppressive forces, and then action to change them. While Mezirow is more focused on personal development, Freire is focused on social change (Clark 1993). Freire's ideas have influenced many people because they can be applied to any context with an inequitable distribution of power – for example the power differential between local organic producers and corporate organic players. Freire's style is problem-posing and dialogic and has also informed the works of critical educators such as Stephen D. Brookfield (1987), bell (hooks, 2003), and Ira Shor (1992) all who could be said to represent transformative learning in practice. Fundamental to Freire's writing is the vision of a just society, not unlike Sumner's vision for sustainable agriculture. Transformative learning is a means to realize this vision.

2.3.3 Transformative Learning and the Conventional Food System

Implicit and explicit in the previous overviews of the conventional food system, organic farming, and transformative learning, is the need for institutional change, as well as empowerment of the general public over food choices and decisions that deeply affect the global socioeconomic and biophysical environment, and a transition to sustainability.

The power of food lies in its literal and symbolic functions of linking nature, human survival, health, culture and livelihood as a focus of resistance to ills of our current societal paradigm (McMichael 2000). The power of transformative learning lies in its ability to empower the individual to think as an autonomous agent – to learn to “negotiate his or her own values, meanings, and purposes, rather than to uncritically act on those of others,” (Mezirow, 1997:11).

As a “problem-posing” metaphor (Shor 1992), food has the power to generate substantial critique of the myth of free markets (McMichael 2000) In fact, McMichael

suggests that food “looms as a force that counters the current hegemony of the market” (2000: 299). This research seeks to find whether the social experience of purchasing wholesome organic food, from local sources, impacts individual normative ideology by inviting customers to think critically about conventional food systems, thereby challenging them to empower themselves for social change.

2.4 SUMMARY

The learning that occurs informally and incidentally in people’s everyday lives is some of the most interesting and significant there is. Learning is most powerful in contexts where people struggle against oppression, and struggle to make sense of what is happening to them and develop ways to take action for change (hooks 2003). Transformative learning theory provides an exceptionally complimentary framework with which to explore the problems of the conventional food system, and the potentialities of sustainable agriculture and organic farming.

Since food is so central to our lives, physically and socially, and it is currently at the centre of two competing paradigms (however unequally), it is a useful case study in the transformation of normative ideologies. A normative ideology is the mindset which is dominant within the society, forming the basis of the public opinion, or the justification for the status quo. This basis usually remains invisible to most people within the society, and appears as neutral, protecting largely unchallenged assumptions – such as the assumption that the Canadian food supply is perfectly safe, and all checks and balances are in place. All other differing ideologies are seen as radical (organic farmers = lunatic fringe), no matter what the content of their message is. Transformative learning is a

process that represents a change of consciousness (Merriam and Caffarella 1999) in that it changes how the learner perceives and makes sense of the world. For example, the learner may become aware of food issues because of a new environmental sensitivity (allergy), but upon learning about food issues they may start to question the practices behind other unrelated consumer goods such as clothing. If the transformation of normative ideologies around the food system leads to a translation into other areas of consumer's conscience, it has the potential to influence adult decision-making to be more environmentally responsible. This will result in a greater potential for the transition of North American society to a more sustainable pathway.

The authors of *Bringing the Food Economy Home* sum up the situation well when they say that food is at the centre of a storm all over the world (Norberg-Hodge, Merrifield et al. 2002). If the food system is the central organizing principle of humanity, and it is being compromised, is it safe to say that humanity is being compromised? It seems we are reaching a critical point. A change in consciousness is indeed what we need. A change in consciousness stems from a change in normative ideology. Tim Lang and Michael Heasman in their book *Food Wars* (2004) illustrate how two paradigms, the "life sciences integrated paradigm" and the "ecologically integrated paradigm," are struggling against each other to replace the dominant "productionist paradigm." Whoever wins the war will alter the future determinants of human survival. They argue that a diet good for biodiversity is also good for human health: "In this very practical sense, as well as in theory, the goal of food and health policy surely must be for humanity to be at one with nature" (Lang and Heasman 2004).

The policy of globalization of our food supply focused on trade liberalization and export-led economic growth; introduction of genetic engineering technology; the loss of local farmers and foods; and the loss of biological diversity, have together created an unsustainable food system. If we want to have food security, we must have farmers (Doucette and Koroluk 2004). The counterculture of farmers and consumers working together to oppose the conventional food system, to localize the production and marketing of food, and to democratize our food cycle, bring hope for the future. Everyday this awareness grows, and people begin to connect their values to their food supply.

APPROACH

3.0 METHODOLOGY

Conducting my research through the lens of an experiential education theory such as transformative learning, and drawing on the works of Mezirow, Habermas, and Friere, I ally most closely with the critical social science paradigm or the “advocacy/participatory approach,” (Cresswell 2002: 9). This theoretical perspective undertakes research that is itself critical and experiential in nature, and which has the end goal of making change (Neuman 1997). An underlying motive of this research is to contribute practical information that will have use in gaining further support for organic production systems, and in helping farmers develop their marketing and education programmes. Current fragmentation and disillusionment in our society have resulted in the alienation of humans from the natural world, food sources being the relevant example in this research. Through studying the transformation of the meaning perspectives of individual customers in relationship to food, I hoped to discover that the individuals adopted a more sustainable world-view that can be translated into civil action. In a time of rapid change, full participation in democracy and morally-sound decision-making are increasingly important to the future. Both however, are contingent on the ability of adults to think autonomously (Mezirow 1997).

3.1 STRATEGY OF INQUIRY

The project includes original field research within Canada, in the form of case studies. Merriam (1998) defines the case study as an intensive, holistic description and analysis of a bounded system. The use of case studies as a strategy of inquiry was

appropriate as it helped me to develop a deeper understanding of the place and actual experiences of the participants (Merriam 1998; Cresswell 2002), it values process (Merriam 1998) and because it is well-suited to studies where the variables cannot be separated from their context (Yin 1994). The purposes of case studies have been identified as the development of a comprehensive understanding of that which is under study, and to enable development of general theoretical statements about patterns in process and social structure (Merriam 1998). These purposes are congruent with my stated objectives. Case studies are also a good fit because, unlike other forms of research, there are no specific methods of data collection and analysis associated with case studies. Any established methods, including participant observation and interviewing can be used in conjunction with this strategy of inquiry (Merriam 1998).

In my research, the learning associated with three different models of organic farm operations in the form of “case studies” was compared. The three case studies are: 1. Elderflower Organic Farm where the farmer and customer interact through sales at a farmers’ market only, 2. The Falls Brook Centre where the farmer actively provides education and outreach through a farm model, and 3. Trilby Meadows Farm and CSA where the interaction between the farmer and customers occurs through a community shared agriculture (CSA) model. The farms I conducted my research on are located in Atlantic Canada. Beginning in mid July, 2006, I spent approximately two and a half months working and living on the farms while collecting data. I chose to undertake my fieldwork on the East Coast because I had a number of contacts there who supported my research in kind, and because there are a number of well established organic farms in the area with little traveling distance between. The organic sector is also quite varied in the

Maritime provinces with vegetables, field crops, livestock, orchards, berries, and maple syrup production all being present. The variety of farms meant that I was able to locate a number of different models of organic producer/consumer interfaces, within a relatively close distance of each other.

After settling on the area of the farms (the Maritime provinces), I selected the case studies based on a number of criteria which included differing producer/consumer interfaces, an adequate number of customers who were willing to participate and that I could sample, that the farms served the local community (weren't growing for export), that the farmers could use help on their farms in their daily operations, and that they were willing to host me and provide lodging and food.

3.2 METHODS OF DATA COLLECTION

The data collected involved both my direct observations as a participant, through working on the farms and at farmers' markets, gaining first-hand experience with the customers; and face-to-face interviews which allowed me insight into the customer's perspectives (Patton 1990). Data was also derived from field notes, which were recorded in the form of field notes, and a field diary (Bernard 1988). Much of the background information that informed this thesis was collected through extensive review of existing documents in the educational literature, and then in the growing literature that surrounds environmental issues and organic agriculture.

These three major techniques of data collection: participant observation, interviewing, and document analysis, really boil down to the basic activities of watching, asking and reviewing (Merriam 1998). Merriam summarizes the act of data collection by

stating: “in the real world of case study research, interviewing, observing, and examining documents merge in the process of understanding and describing the phenomenon of interest,” (Merriam 1998: 149), hence my approach.

3.2.1 Participant Observation

The literature around participant observation has been most thoroughly developed in Anthropology, as watching and listening are the underpinnings of all anthropological research methods (Bernard 1988). Although widely used and written about, participant observation is one of the least well defined methodological approaches (Bernard 1988). While many different methods are available it can be broadly defined as a research method by which the researcher tries to adopt the same lifestyle as the people being studied (Miller, VanEsterik et al. 2004).

While on each farm I worked full time and participated in all aspects of the daily life of the farmer, from weeding, harvesting, planting, and fertilizing to riding a potato picker machine, and packing CSA bags. This method related to all five of my objectives and allowed me to gain insight into the processes that were going on, and then transfer my knowledge in an appropriate manner. This led to an increased understanding of the socioeconomic and biophysical conditions of the farms and farmers, as well as a personal learning experience. Since completing my research I have been more able to participate in, and hold opinions about, the organic sector from a producer’s point of view (as well as my past role as a consumer). The most valuable aspect of participant observation in my research was its use as a method of establishing rapport within a community (Bernard 1988). As a direct participant, I was living and working on (or near) each of the farms I visited, which helped me to establish connections within the local organic community. It

also deepened my understanding of the challenges and opportunities faced by the organic movement within Canada. This invariably helped to inform my analysis of how the organic community can use the findings of my research in their educational initiatives.

3.2.2 Interviews

Interviews are designed to give more directed and specific information than that which can be gathered through participant observation and the recording of experience. They are useful in that they can provide information on reported behaviour, attitudes and beliefs (Walker 1985). Since critical reflection that results in a change in beliefs and values is a primary element of transformative learning theory, interviews provide the perfect method of data gathering for this research. An interview is a method that gathers verbal data through a purposeful line of questioning (Miller, VanEsterik et al. 2004). There are varying formats and styles of interviews. I used semi-structured interviews, and conducted all of them myself. The interviews informed the bulk of the data analysis. And the quotes used throughout Chapter represent majority views, or are used to illustrate a point, unless otherwise noted.

I had originally hoped to interview a minimum of ten to fifteen people for each case study, and was successful. I interviewed forty-two participants in total and coded them as follows: Elderflower Organic Farm = MLOO-01 to MLOO-14, the Falls Brook Centre = FBC-01 to FBC-15, and Trilby Meadows Farm = TMF-01 to TMF-13. The participants were chosen randomly from customers of the farm. While each case study had a different context, my overall method was to ask every adult who seemed able, if they'd be willing to participate in an interview. I then interviewed all those who were willing.

Semi-structured interviewing met the dual need of wanting a clear set of replicable questions to ask each respondent, while allowing me to maintain discretion to follow leads, if other information provided by respondents offered new insights. In this vein, I avoided structuring the interviews too formally to allow for discussion on related topics.

Semi-structured interviews are carried out in conjunction with the aid of a guide. The guide is a predetermined set of questions that must be asked in a particular order to each respondent. Using a guide helps to ensure reliable, comparable qualitative data (Bernard 1988). Bernard recommends using this method when dealing with people who like to use their time efficiently, saying that it demonstrates control of what you want from an interview, while leaving you free to follow leads, as well as showing “that you are prepared and competent, but that you are not trying to exercise excessive control over the informant,” (Bernard 1988:205). While this may be an unsuccessful approach in some cultures, I believe it is well-suited to a North American context.

Interviews were conducted in a mutually agreeable location. Due to the nature of the location, for example the market, some of the interviews were more rushed than others. This was a learning experience for me. The interviews were used to determine the participants’ opinions on the purchase of organic and local food, why they support organic growers, and on how they view any changes in their knowledge, beliefs, values, or points of view due to their interaction with the organic farmers. The interviews consisted of asking open-ended questions following the interview guide (Appendix A). All participation was voluntary. All respondents were informed of the nature of the study, the anonymity and confidentiality measures, and my intent to record the interview

beforehand. Upon agreement to participate, the respondents signed a consent form (Appendix B). Thirty-nine of the interviews were recorded on an MP3 player the size of a nine-volt battery. This instrument is unobtrusive, and therefore did not intimidate participants. I decided to record the interviews to ensure that no data was missed through my amateur note-taking, however one participant preferred not to be recorded, and two other submitted their interviews by email because they wanted to participate but did not have the time to do a face to face interview. Participants were provided with a personal copy of the written consent form, and options for follow-up were specified by them on my copy. Follow-up will be provided in the form of a copy of the research summary, upon completion of my thesis. Notes on the interview were documented immediately following each interview. Notes contained contextual data that I felt might be important for recall and interpretation at a later date.

3.2.3 Document Analysis

My third method of data collection, document analysis, consisted of a survey of the literature surrounding the associated topics. Journals, books, government reports and documents, the reports of non-governmental organizations, and various other information sources have been utilized. Part two of this thesis is based upon the document analysis, which also helps to inform all other aspects of my research.

3.3 DATA OUTCOMES

The impetus for undertaking this study was an interest in discovery, insight, and interpretation in context. The data outcomes are therefore qualitative, and include both descriptive field notes, and the informant's information gathered through semi-structured

interviews. All of the interviews were transcribed and then analyzed. I used QSR NVivo, a qualitative data-analysis software to code and explore the data in search of themes or regularities. QSR NVivo is designed to aid in handling non-numerical and unstructured data in qualitative analysis. The software provides tools to code themes and categories within the data and thereby deepen the analysis (QSR 1999-2002).

In order to analyze my data, I first transcribed all of the interviews, and then coded the responses to each question together. This allowed me to look at all the responses to one question simultaneously. For each question I then went through all the responses and coded them into rough categories such as yes/no, or communicative/instrumental learning. From there I continued further breaking down the categories into subcategories, or “nodes” as referred to by the program. This allowed me to see patterns in the data set through the recurrence of certain themes.

I have centred the discussion of my results on key themes that emerged from the data set and their relationship to my stated objectives. Where possible, these themes are correlated with theories already established in the transformative learning literature and strengthened by reference to various resources consulted in my literature review. They are represented by direct quotes from participants. While I have focused on themes congruent across the data set, in some cases viewpoints not held by others have been explored or commented on for just that reason. By employing multiple methods in my research, including direct participant observation, face-to-face interviews, and data-analysis software, I came to a new understanding of the topic.

YOU ARE WHAT YOU EAT: INFORMAL LEARNING THROUGH THE FOOD SECTOR

RESULTS AND DISCUSSION

4.0 CASE STUDIES

In this chapter I introduce the three case studies in detail, and then present the results, followed by a discussion. As previously noted, the three case studies selected represent different types of organic farm operations based around a specific consumer/producer interface. The participants all identified specific reasons for eating organic food. While the motives were somewhat different per farm, overall, health was the most consistently ranked reason (31 participants). Environmental concern was the second (21 participants), and then local economics (15 participants). The specific breakdown per farm is further discussed in the following descriptions of the case studies.

Case Study #1 - Elderflower Organic Farm (Market Garden)

Elderflower Organic Farm is a successful market garden located half an hour's drive southeast of Charlottetown on Prince Edward Island. I spent one month working on this farm six days a week, spending two days per week at the market – every Wednesday and Saturday. The farm is operated by Margie Loo. Margie is 38 years old, with a University education, and is from the island, where her family has farmed since emigrating from Holland. Margie has a strong social justice background and continues to be involved in different social and environmental justice initiatives locally and internationally despite her more than full time job on the farm.

The farm itself is sixty-nine acres, with twelve acres under production. Margie has been farming the land for seven years. In the field she grows potatoes, peas, squash,

onions, kale, salad greens, herbs, carrots, endive, and cabbage. She also has a large building with an attached greenhouse where she grows grapes, cherry tomatoes, peppers and herbs. The building also houses her sprouting operation, and has a full basement



for food storage. Another three greenhouses flank her large kitchen garden, where she produces her own food. The largest of these three greenhouses produce tomatoes, basil, peppers, cusa (a Lebanese zucchini favoured by the significant Lebanese population on the island), zucchini, and cucumbers. The other two small greenhouses produce eggplants and different varieties of cherry tomatoes. Margie's operation is very low-tech in that she does almost everything by hand – with some help from her wonky old tractor.

Margie focuses on soil health and the nutrition value and vitality of her products, although she claims her biggest challenge is how to enrich the land without the capital to purchase inputs, and having no livestock on her farm. Her farm is certified organic and



her main crops for the market are salad greens (kale, arugala, spinach, mesclun, lettuces), herbs (basil, parsley, cilantro, dill), tomatoes, cucumbers, zucchini, cusa, and sprouts. Margie shares her booth at the market with her brother Raymond, and sister Joyce

Kelly, and together they provide an impressive array of certified organic produce. Many kinds of potatoes, beans, berries, vegetables, herbs, and dry goods from Speerville Mill (an organic grain processor located in NB) make the Island Sunshine booth one of the most popular in the market. Many times I saw Joyce and Margie give out all manner of instructions and tips on how to grow, process, or store a variety of things from houseplants to vegetables. For Margie it is important for her to be at the Saturday market each week in order to have that contact with her customers. Margie and her sibling's dedication, the combination of friendly advice, warm faces, and big smiles result in a dedicated customer base:

Margie is an amazing example of someone who is making decisions to produce organically for political, economic, environmental, and moral reasons and I fully endorse her decisions and her actions, and so I feel good about giving her my support through purchasing her goods and services (MLOO-01).

Because I know Margie has really good organic ethics. She is really into the spirit of organic. It's not just like following regulations, like she really. I know she really does follow regulations, but she does more than that, she is just really into the spirit of it (MLOO-04).

Customers of this farm (seventy-one percent) listed health as their number one reason for purchasing organic food. Fifty-seven percent also sought organic food because of environmental concerns, and twenty-nine percent because of taste. Local economics played into the decision for twenty-one percent, and quality and freshness for fourteen percent.

Case Study #2 - The Falls Brook Centre

The Falls Brook Centre is located in western New Brunswick. It is a one and a half hour drive from Fredericton, and at least thirty minutes from the closest village. The Falls Brook Centre is run by Jean Arnold, the Executive Director. Jean is fifty-eight years

old with a University education. She was born in England, but has been living in North America since her early twenties. Jean has a strong background in intentional communities and is very active in environmental and social justice movements. She sits on the Boards of various groups, is the Vice President of Canadian Organic Growers, and her very life represents an extended activism. The FBC was formed in 1992 and is a non-governmental organization dedicated to providing a demonstration of sustainability. The FBC is contracted by the Department of Foreign Affairs and International Trade (DFAIT), and Canadian International Development Agency (CIDA) to run internship programs. The successful candidates for the internships must be recent graduates of a Canadian University, and be under 30 years old. These interns come to live at the FBC for a period of time to become acquainted with issues surrounding sustainability before going on an international placement with one of the FBC's partner projects. After their placement, the interns return to the FBC for a period of time. The interns specifically apply to positions open at the FBC, meaning they have an interest in learning about sustainability and international development – however, not all of them have had prior experience with environmental issues and sustainability. The majority of the interviews I conducted at the FBC were with these interns, as well as staff of the FBC, and visiting WWOOFers.² The FBC is open to the public to tour the grounds which have a variety of demonstration alternative building techniques, alternative waste management strategies, hiking trails, gardens, mushroom logs, and edible berries.

² Willing Workers on Organic Farms (WWOOF) is a program that matches member WWOOFers with member WWOOF hosts on farms around the world, providing WWOOFers with a hands-on experiential learning opportunity in sustainable growing and living. You will notice reference to this program comes up in many interviews.

People at the FBC are motivated about food; and for environmental sustainability reasons. One interviewee went so far as to express his belief that caring about food for personal health reasons was selfish because it showed a lack of seeing the big picture. Experiential learning is what it is all about at the FBC, from harvesting food for dinner from the CSA garden, to firing up the woodstove to cook on, to using the solar shower, to living in a building powered by the wind or solar electricity, or insulated by straw. The FBC provides participants with a chance to live new experiences.

The FBC refers to their garden as a CSA, although it is not run as a traditional CSA. All of the interns and staff that live and work at the FBC pay into the cost of operating the garden on a weekly basis, making it similar to a CSA model. The garden is a one acre plot that supports over forty different plant species, each with many different varieties. Some of the main crops while I was there were root vegetables such as carrots, potatoes, salad greens such as kale, and peas, beans, and herbs. The garden is not irrigated, and a short cool growing season saw a few nights of frost even while I was there – at the end of August! We literally had to tuck the garden in, covering it with bedsheets to try to keep the frost out. The soil is very rocky and provides a real challenge – and learning opportunity to the avid gardeners at FBC. Interns, staff, and WWOOFers, as well as visitors to the farm all have the opportunity to dig in the garden, or harvest their daily sustenance from it. The garden is certified organic by the Organic Crop Improvement Association (OCIA). The gardens have been certified since 1999.





Photo credit: Falls Brook Centre

While seventy-one percent of customers of Elderflower Organic farm listed personal health as their number one reason for eating organic food, sixty percent of the participants at the FBC choose to eat organic food for environmental reasons. Personal health was a close second, listed by fifty-three percent of the participants. Thirty-three percent of the people I interviewed chose organic also because of concern for local economics. Three of the FBC respondents (twenty percent) gave a response that I had not yet heard described as such, and only came up once more in my interviews on the next farm, and that was that eating organic food is about ethics.

Case Study #3 - Trilby Meadows Organic Farm and CSA

Trilby Meadows Farm is located in North Milton, approximately twenty minutes northwest of Charlottetown, on Prince Edward Island. Due to its close proximity to the capital city, the farm is at an advantage for accessing the market share of organic consumers in the area. The farm is run by James Rodd who is fifty-two, and Sylvie Arsenault, although Sylvie works two different jobs which equal more than full-time, off the farm. They are both heavily involved in their community in political and social activism. The farm is one-hundred and ten acres, and has been farmed organically since 2000. It is a mixed-use farm, with grain crops, vegetables, some fruit such as strawberries, beef cattle, Belgian horses, and pigs. The cows were certified organic for a

number of years, but recently lost their certification due to a dispute over the availability of clean drinking water. This was Jim and Sylvie's second year operating the CSA, with a total of thirty-one shareholders. The shares are distributed as twenty-five family shares, 5 single shares, and 1 medium share. Weekly deliveries are made beginning in June, and lasting until November. Jim and Sylvie have partnered with other local farmers, which they refer to as "associate farmers" in order to ensure that adequate amounts of produce are available during different times. The growing season, and its success, differs drastically in certain areas of the island, with some areas having produce come on much earlier, or last much later than elsewhere on the island. Jim and Sylvie purchase food at wholesale prices from these other producers and use it to supplement their weekly deliveries when their own production levels are low.

At this time the CSA is successful in that the customers are happy, but the endeavour is not turning a great profit. My own observations were that it takes a significant toll on Jim and Sylvie to carry out this weekly ritual. Their operation could run much more smoothly if they had the capital to invest in appropriate infrastructure on the farm, such as a greenhouse.

Many of the members of this CSA were part of a French book club that Jim and Sylvie gave a presentation to about joining the CSA. This resulted in the bulk of the membership being fairly well-educated, upper-middle-class adults with Professional or Government employment. People who are employed by the government are thought to be very well off on PEI because they have year-round income and benefits, unlike much of the permanent population. Every one of the CSA members I talked to mentioned personal health as a concern and reason for eating organic food. Fifty-four percent eat

organic food and support the CSA because of local economics, and thirty-one percent because of environmental concerns. The participants seemed very happy with their produce, although I noticed with many members of this group it was not so much necessarily even the quality of the produce that they were concerned with, as compared to the whole experience of membership in this type of local economy (that supports organic) that was important to them:

I thought also that it was nice to encourage these people. Because right from the start I thought that they were really good people. So I went for it, (TMF-07).

Because, well, it's available, and we support the idea of it, and we're familiar with the people that are doing it. It's a community thing as well, we're trying to be part of something where we're supporting...to make sure that it's available. We don't have a large selection, there's not a lot of competition for them either. There are some alternatives and we do get things from other suppliers I guess, we know other people that grow, but we want to make sure that this continues. It means investing in something. It can't simply be a matter of shopping for the best deal kind of thing because it's a smaller market here, (TMF-02).

Supporting the local community came up a number of times in relation to why the participants source food from the CSA:

And because this was becoming more of an awareness of mine, and I wanted to give it a try, and hadn't sort of attempted to purchase organic foods before and so I thought what better way to do it than to support someone locally that you know (TMF-04).

To support the community. We've been buying organic for quite awhile. But, I've always been torn between the ecological impact of transporting all that from Chile and all that. So if we can get all of that here, then globally there's a whole lot less of an impact. And on top of that, to be able to spend your money close to home, it's never a bad thing (TMF-06).

4.1 PARTICIPANT DEMOGRAPHICS

At the beginning of each interview I collected demographic data from each participant including their age, gender, education level, occupation and family size. Upon establishing attributes in NVivo I used the first four categories, leaving out family size because of difficulties in using it comparatively given the large age spread. I felt the other four categories would provide some interesting information in terms of who is accessing organic food, as well as to help contextualize the data in my analysis.

4.1.1 Age Categories

I felt that age categories were an important attribute given the varying levels of exposure to environmental issues that one could assume would relate to age. I clustered the participants into age categories, but wanted to ensure the categories were meaningful in a Canadian context. The growth rate of the Canadian population has slowed, with the bulk of the population getting older. Each of the different age categories I chose have specific characteristics and consumer behaviours. The categories I used are “Depression” Babies born between 1928-1937; War Babies 1938-1946; Baby Boomers 1947-1966; Generation X 1967-1976; and Generation Y 1977-1994 (Kotler, Armstrong et al. 2005). Currently, the three largest age groups in the Canadian population are the Baby boomers, Generation X, and Generation Y. This is also reflected in my data, as the three largest age categories I interviewed were Generation Y (33%), Generation X (21%), and Baby Boomers (33%). The post WWII Baby Boom (1947-1966) produced an average of 4 children per household resulting in 9.8 million newborns in Canada who are now referred to collectively as the baby-boomers (Kotler *et al*, 2005:173). “In Canada the baby

boomers have become one of the largest forces shaping the marketing environment,”

Table 1: Overall Age Categories of Participants, and Percentage by Farm

Age Category	% of participants overall	% of participants MLOO	% of participants FBC	% of participants TMF
Depression: 1928-1937 = 69-78	2.4	7	-	15
War Babies: 1938-1946 = 60-68	9.5	14	-	-
Baby Boomers: 1947-1966 = 40-59	33	36	13	54
Generation X: 1967-1976 = 30-39	21	21	20	23
Generation Y: 1977-1994 = 12-29	33	21	67	8

(Kotler *et al*, 2005:173). The boomers account for one third of the population, make up forty percent of the workforce, and earn over half of all personal income (Kotler *et al*, 2005:173). Generation Xers were born in the birth-dearth after the baby-boom. This population of 7 million represents the first generation of latchkey kids – and those raised on processed foods and television – hence their other nickname “the MTV generation.” “Gen-Xers share new cultural concerns. They care about the environment and respond favourably to socially responsible companies,” (Kotler *et al*, 2005:175). Generation Y are the children of the baby boomers. They possess “utter fluency and comfort with computer, digital and internet technology,” (Kotler *et al*, 2005:176). They love things that are green and relate well to causes. This has led Gen-Y to be referred to as “yeppies” instead of “yuppies”. A yeppy is a Young Environmental Professional (as opposed to Urban).

4.1.2 Gender

Given the nature of my research, and the fact that women still tend to be responsible for providing food for the family, or at least filling the cupboards, the largest percentage of my respondents were female. Twenty-nine percent of the MLOO respondents were male, thirty-three of the FBC respondents, and thirty-eight percent of the TMF respondents. Overall, males represented thirty-three percent of my interviews, and females the remaining sixty-six percent. While perhaps some of the participants answers could have gender factored into them, I have not used or dealt with gender analysis in my data results. As an issue related to food, gender only specifically came up once in my interviews, and it was a very interesting point and I am sure something that many organic food eaters deal with. One of the participants had been very influenced by her time as a participant in the Youth Challenge International program in Mexico. Her comments were specifically on the role of gender in the organic movement, as she realized that cooking in Mexico was a full time job. Cooking with whole foods and making everything from scratch is a very time consuming endeavour – “how can we accomplish it, without reverting back to gender roles and not lose our independence,” (FBC-09)?

4.1.3 Education

It appears that organic food shoppers are a formally well-educated bunch. This is interesting given the themes that came up in the interviews that linked love of the environment to experience as opposed to formal education.

Overall, seventy-four percent of the participants I interviewed had at least one University degree. Seventy-nine percent had post-secondary training, including College

and University. Separated by farms, customers of the market garden, who purchased their food at the Farmer’s market had the lowest percentage of postsecondary training – with fifty-seven percent possessing one or more University degree. The remaining forty-three percent had attained a High School Diploma. This is reflective of the wide variety of people who access the Farmers’ Market.

The Falls Brook Centre had the highest levels of postsecondary attainment with eighty-seven percent of participants possessing one or more University degrees, and ninety-four percent having postsecondary training including College and University. This is slightly misleading for a number of reasons. The participants at the FBC represented a young population. Today there are higher levels of postsecondary achievement amongst younger generations than older ones. But, most importantly – to be an intern at the FBC, a position which is funded by the Federal Government (DFAIT or CIDA), you must be a recent graduate of a University. Resultantly, only a few of the staff, and a visiting WWOOFer were not University graduates.

Table 2: Overall Education Level of Participants and Percentage by Farm

Education Level	% of participants overall	% of participants MLOO	% of participants FBC	% of participants TMF
Masters/PhD	17	7	7	38
University Bachelor’s Degree	57	50	80	38
College	5	-	7	8
High School	21	43	7	15

4.1.4 Occupation

The high levels of education amongst the participants I interviewed correlate with the fairly good jobs the participants held. All participants were employed in some

manner, or retired, reflecting a demographic not representative of the general state of most people on the East Coast. While some of the participants did not have large incomes, and their food expenditures represented more than other people their age would spend who eat conventionally, many of the older participants were able to afford the extra monetary costs of organic food. The largest overall percentage of participants work for an NGO. This is skewed because of the FBC staff. The second largest group, are those employed by government or that have a professional designation (i.e. Teacher). Again this group represents what is considered a well-off sector of the permanent residents on PEI and in NB.

Table 3: Overall Occupation of Participants and Percentage by Farm

Occupation	% of participants overall	% of participants MLOO	% of participants FBC	% of participants TMF
Retired	7%	14%		8%
Professional/Government	24%	21%		54%
Self-Employed	10%	21%		8%
Mother/Housewife	10%	14%	7%	8%
Non-Governmental Organization	31%		87%	
Student	2%	7%		
Other	17%	21%	7%	23%

The students I interviewed, though living on small incomes, were committed to eating high quality food, and found ways to reduce their related costs through endeavours such as buying clubs, CSA membership, living in communal housing, or growing their own. Overall I would not say that the income level of the participants was a constraint on their purchasing habits – however, they have already identified organic as something worthwhile.

4.2 LEARNING

Almost all of the participants identified that they had learned new things through purchasing organic food. Sixty-seven percent of the participants said that yes, without a doubt, purchasing organic food had changed their opinions of the conventional food system. Many others felt that it was an influence or part of their learning about the conventional food system and other environmental issues. This learning was analyzed based on two principal categories established in the transformative learning literature and stemming from Habermas' identification of types of learning and problem solving. These two types of learning are instrumental and communicative. These types of learning are relevant to the discussion because of their potential to foster sustainability. Their theoretical background is discussed in section 2.3.2. Instrumental learning can lead to communicative learning, and vice versa, and often the two are tied together.

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

The data derived from the interview questions related to learning were divided into the primary categories of instrumental and communicative, and then further into secondary, theory-based subcategories following Diduck & Mitchell (2003). The secondary categories were further divided into tertiary grounded classes, or themes found within the data (Diduck and Mitchell 2003).

4.2.1 Instrumental Learning

Instrumental learning is learning how to manipulate or control the environment (or other people) in a way that enhances performance (Mezirow, 1997:6). Instrumental learning has a number of characteristics: attainment of skills or information; things learned may be tested empirically – such as how to grow a carrot, or what vegetables grow well in the local area during what seasons; determination of cause-effect relationships; and task-oriented problem solving (Mezirow 1995). A central tenet of instrumental learning is assessing truth claims, therefore the “developmental logic is hypothetical-deductive, and empirical methods are more often appropriate for research,” (Mezirow, 2003: 59). Instrumental learning builds the adult’s capacity to deal with the outside world through technical understanding and manipulation or control of external environmental variables. The four subcategories of instrumental learning were: 1) scientific and technical knowledge, 2) legal, administrative and political procedures, 3) social and economic knowledge, and 4) potential risks and impacts. Tertiary, grounded themes from the interviews are organized under these headings in the following table, and described below.

Table 4: Instrumental Learning Outcomes Related to Consumption of Organic Food

Primary Category	Secondary Category	Tertiary grounded categories
Instrumental Learning	Scientific and technical knowledge	Cultivation skills Food preservation Cooking skills Diet/nutrition
	Legal, administrative and political procedures	Certification requirements Standards
	Social and economic knowledge	Globalization Trade / Market economics Environmental/environmental justice Re-localization of economies Rural and sustainable living Labour requirements
	Potential risks and impacts	Biophysical Interconnectivity of systems Personal health

Following this, most of the instrumental learning identified by participants related to their learning new skills and information. Because of the nature of a market garden, (in the case of Elderflower Organic Farm), customers who only interacted with the farmer at the market reported little instrumental learning. Of the customers who reported greater learning, two of them had been to the farm, one on a farm tour, and one worked there as a WWOOFer. The WWOOFer, however reinforced the success of the WWOOFing program in providing experiential learning to its participants: “I’ve learned more about growing food from Margie than I have from anybody else, even though I’ve physically worked with other farmers. I’ve learned more about growing techniques and soil, and soil health requirements for optimal growth” (MLOO-01). The customer who had visited the farm during an organized farm tour reported learning about different varieties, and receiving quite a bit of information (MLOO-10). When asked what he had learned at the market, one respondent stated:

I've learned a lot of, I've learned about a lot of new foods I hadn't tried before. Things like Russian kale, that don't typically show up in the supermarket. I've learned a lot about different varieties, and I've learned a fair amount about what can and can't be grown here. I've learned about different flavour characteristics. The best melon I've ever had has been on PEI, astonishingly, but it was very small. You know, you'd think the best melon you'd have would be in Crete and it would be very big (MLOO-05).

Participants at the Falls Brook Centre had the largest instrumental learning curves in that they picked up many new skills related to growing and preparing food. Many also saw the possibilities of living in a vastly different manor than the way they had been used to.

Definitely cooking on a wood stove was quite new to me when I was first here as an intern. I think just the aspect of really seeing, okay what could I actually eat if I were just trying to eat here? And canning and storage things. That's something that's brought more into focus when you are living from the garden. I think it is really possible. If you wanted to really here, you could live from mostly locally sourced foods. And you can see that from a lot of the women around here who can their own foods (FBC-09).

At the FBC, almost every daily activity becomes an experiential learning opportunity, from taking a shower in the solar-heated outdoor shower, to using the outhouse, to splitting their own wood for heating and cooking, growing and harvesting their own food, and eating communally. For many these were new experiences: "I've learned how to bake bread, how to use beans, or cook whole foods in general. I've learned how to use a few vegetables I didn't really know how to use before" (FBC-09). Almost all the participants embraced their new living arrangements and few expressed any dissatisfaction:

I've never cooked with these kind of ingredients before either, like having none or little meat, and having to go mainly on beans or straight

vegetables from the garden...besides the wood oven, I think it is a very nice way we do things here. This thing is just very slow and I get angry at it often. (*Referring to the wood stove*). The communal living, eating is nice. I like having lots of people around the table for a meal like that (FBC-11).

Many of the FBC participants will leave with a new sense of respect for both food and the people who produce it:

I learned how much harder work it is than you think about it in the abstract. I'd always known about organic agriculture, and understood it in abstract, but to actually see it in practice, you know in such a small scale is really interesting. Just how much work goes into it, and how it is harder without pesticides in a lot of ways, in terms of managing things like blight and things like that. That's been a real eye-opening experience (FBC-12).

I think the biggest thing is just being in close proximity to your food. And so actually going out in the evening and picking things directly from the gardens, and then also having access to all these whole foods and learning how to cook with them is I think a really great lifelong skill (FBC-14).

Many participants in the Trilby Meadows Farm CSA did not know what fruits and vegetables could be grown in the area, or their growing seasons, prior to their experience with the CSA. Many reported experimenting with different foods and cooking vegetables they were not used to. A few participants developed a new understanding of how food systems can work. When asked what she learned through her interaction with this vendor one participant stated:

I've learned a lot from them through doing the whole project. Through the project they taught us what their farming methods are, a lot about the CSA itself, how they have associate farmers – people who produce different other crops so if they're running low on one they have people who provide the other ones. So they kind of have a network of people who help them out. What crops are going to be available when. All the work that it is for them to do it, and you know, you're going to have your bad seasons. It is more probably that you might have a bad crop sometimes, but you kind of get really bountiful crops sometimes and poor ones the other times and to kind of just learn to go with the flow. To just accept it I guess (TMF-13).

Being a member of a CSA also provides a learning experience about seasonality – something that many consumers have forgotten given the constant availability of produce in grocery stores:

I think the real learning experience happens when people are involved in a CSA because then people start to see what's seasonal and they learn about different produce that they've maybe never had before that just comes to them. When I worked on a CSA farm before there was a real learning curve with people who were members of that CSA because they wanted to have certain produce and didn't want other produce. And they started to realize, oh a farm doesn't grow vegetables all year round, whatever I want, it is a seasonal thing (FBC-09).

I heard from a number of the members of the TMF CSA that they felt more connected to the food system through having to eat what was provided. It was an eye-opening experience about what is in season when, what grows (or does not) in the local area, and gave them a new appreciation for the fragility of the food system. As the following member stated:

I don't know that there's been any kind of ahas. I just know I'm really enjoying it, and the other thing is it's nice to have, I kind of enjoy this because there's a variety, you come and it's like a surprise every week. You come and there's a great variety and you kind of move through the season as well. Which is really nice. You realize that you don't have to be buying lettuce in October. It's kind of more "What's in season?" And that's probably a better way to be doing things, TMF-12.

When asked why they chose to source their food from the Farmer's market, the number one answer of the participants was because it was local. Participants also enjoyed the community atmosphere and the chance to interact with the farmers, and to see where their food was coming from.

Because it's locally grown and I like to support local farmers, and that in turn is good for the environment because it's food that hasn't been trucked here from all over the place. I also like the atmosphere here. It's a friendly atmosphere, (MLOO-11)

Because I like the freshness and I like the people. I like to come and get to see the farmers, (MLOO-14).

Many of the customers patronize certain vendors at the market because of their perceived alignment with the personal values of the consumer:

Margie is an amazing example of someone who is making decisions to produce organically for political economic environmental and moral reasons and I fully endorse her decisions and her actions, and so I feel good about giving her my support through purchasing her goods and services, (MLOO-01).

Partly because it's fun. It's a concentrated way of interacting with people who are concerned with food quality, food security. And it's a community hub in other ways as well, and partly because it's being sold primarily by those people who produce it directly, so there's fewer steps between the producer and the consumer. I like to shorten that supply chain as much as possible, which establishes a greater value chain for the producers, so if I could buy at retail prices from producers, then I could put more money in their pockets, and they're not going to go out of business and it'll perpetuate a cycle of organic growing and relative prosperity. The other thing is it's a way to find out what's available in season of a high quality in one stop shopping. So it combines real convenience with very high quality, (MLOO-05).

Participants at the Falls Brook Centre showed a distinct interest and commitment to supporting local Farmers. Most of those interviewed mentioned specifically that they valued the importance of local over organic – although local-organic would be their ideal. Many mentioned the tension they feel when faced with the choice between purchasing organic food from international sources and purchasing local foods that are not organic.

...If you're talking about natural resource management and taking care of the environment then you also have to consider where your products are coming from and not just buy them blindly because it's stamped organically approved or certified. So that also depending on the time of year as well. So if there's an organic market near me or at least a market. And that's kind of a whole different question on its own. I would probably

buy something local even though it wasn't organic, as opposed to something that's organic and has come from far away. So I guess I'm sort of stuck between a rock and a hard place (FBC-02).

Well I'd rather, personally I'd rather grow as much as I can - that's the first port of call. And then I like to support local producers. I like to - I suppose all of it is hoping to undermine conventional agriculture and hoping to undermine Supermarkets, so putting at least as my earned money into the supermarket chains to support people far away. So wherever I can buy from local people I do (FBC-10).

It's interesting because it's sometimes hard at the grocery store when you see a locally grown... it's sometimes hard to choose between something from the states that's not organic, and say an organic orange from Israel. You're like, well, what's the trade off? It's almost better to buy - I would choose the one from the states because it has traveled less of a distance to get to me, so it's less fossil fuels. I would say in a lot of cases I would source local over organic just because of the fossil fuels issue (FBC-12).

Personally I prefer local over organic. I prefer local organic over all of them of course (FBC-13).

The customers of Trilby Meadows Farm CSA showed a similar commitment to local when asked why they chose to source their organic food in this manner:

I think one reason is they put a lot of nice variety into the food. But I also know exactly where their food is coming from. And I feel pretty good about that. Also it's coming right here on the island, so it's local, and I've always been a big supporter of the local economy. It's also hands on if you get to know the people that are selling you your food. And also now that I've come out to their farm I can really see exactly where it's grown, so I feel more of a connection to the food in that respect too. And I trust it to so. It's also just convenient that they put a nice package together every week to. Yah, you can do the same thing in a grocery store, but I kind of like it that someone puts it together for me. I also kind of like the surprise a little bit, of what you're going to get. Because quite honestly before there was mass farming, a hundred years ago, you just had to eat what the land gave you. And that's what I like about it too. You just have to eat what the land produces. You didn't get stuff shipped to you from South America and Africa and stuff like that. Like you do now. So I feel maybe that's the way it should have been, and should stay too. I like the feeling of that aspect again. You just have to eat whatever comes your way (TMF-09).

When I go to the grocery store, I often choose local produce (that is not labeled organic) over organic food imported from South America or elsewhere (TMF-11).

Sources of Learning

The participants drew upon a large breadth of information and experiences in learning about the organic food system. It is hard to define the sources of instrumental and communicative learning separately, and especially how they possibly impact transformative learning. The main sources of instrumental learning participants identified could be categorized as personal research, producers and retailers, media, experiential learning (employment, growing food), and formal education. One of the participants pointed out that, similar to many grassroots movements, there is really a lot of sharing that happens. The structure of rural community (in its traditional, or revitalized sense) also facilitates the sharing of knowledge.

Many participants were engaged in personal research on the topic. MLOO-1 sought information on organic food herself because it was of interest to her, and she wanted to ensure that she was making informed consumer choices. "Just realizing that my power as a consumer is as important as any perceived democratic power I have...I try to be really conscientious in extending myself, and support an environment I endorse,"(MLOO-01). FBC-01, FBC-12, FBC-14, and TMF-07 sought out books on the subject of organics. TMF-02 learned about organics originally from a cookbook:

It's probably multiple ways of being exposed to it – reading. *Diet for a Small Planet* it's a recipe book, but it's mostly a book about equitable use of resources. But once you become interested then of course you are going to pick up on various sources of information to enhance your information. People like David Suzuki and the Suzuki Foundation talk about it, and you get into co-ops like this and people talk about it, (TMF-02).

Producers, vendors, and retailers provide a lot of information to their customers as well. TMF-11 learned about organic food from the health food store. Members of the CSA identified that much of their learning about new foods came from Jim and Sylvie: "They tell you what it is, how to cook it, what it's good for," (TMF-06). TMF-09 gets most of his information from talking to people that are organic farmers themselves, rather than searching out literature – although he still picks up any information he sees to read at the market. TMF-05 also learnt most of her knowledge through farmers.

Media and advertising grab many people's attention. Many participants told me that once they had an interest in organics they would pay a lot more attention to related news items, or to product advertising containing related words such as "organic." MLOO-03 a self-avowed news-junkie, credited much of her information to reading newspapers, listening to the radio, and watching TV. MLOO-11 learns a lot from magazine articles, as well as a bit from the newspaper. MLOO-14, a bookstore owner, does her learning through reading. FBC-03 and TMF-05 read the newspaper, and listen to the radio for information. TMF-10 watches two French TV shows that talk about how food is grown and prepared: "La semaine verte," and "L'épicerie." TMF-12 pays attention to anything she hears on the radio about food – usually CBC – because it is one of her interests. She says that although she hasn't done any research, she is more in tune with these issues when she listens to people and their experiences, or through listening to the radio and reading things. "I guess to a certain extent, it is pretty self-explanatory because all of the advertising campaigns say its not done with pesticides or GMOs and I guess my in-depth learning about organics came from being an intern at the FBC,"(FBC-06). Labels were also identified by some participants as great sources of information. "I

think labels are really key. Dr Bronner's soap – not that that really talks, it's more like religious paraphernalia. But, it's just like wow, there's so much information on one label, how could you not read it," (FBC-02).

Many of these sources of learning could be classed as experiential learning - from taste to growing things themselves: "I didn't really believe organic was much of anything – I was like, it's great for the hippies....as my palette has gotten more refined...I've definitely noticed a difference, definitely noticed a difference," (MLOO-02). MLOO-12 has learned the most through growing organic food herself. MLOO-13 always had a garden growing up. Her father only used horse manure on it, and now she has no idea what is in the food, so she looks for organic. Health issues are also a trigger for experiential learning. "I don't care what Cyngenta and those people say about no correlation between cancers and pesticides, I believe it's there. There are too many people, in this province particularly, with cancers and respiratory problems for it not to be," (MLOO-03). MLOO-08, another PEI-er has learnt about organics through the media – and "also through living on PEI. There's a high incidence of cancer. And I've lost way too many people that I love to cancer, which is a brutal way to learn." FBC-13 is from an agricultural family in Nova Scotia: "I grew up with pesticides. I've been spraying pesticides since I was...I don't even know." A young couple living next door to the FBC also owe their learning experience to practice:

He actually went and worked on various organic farms, and sort of came and did even a year-long apprentice on a more commercial basis. But my experience has been just growing things at FBC was a really hands on aspect and then it made sense; I had read stuff before hand, and also continued to read things about organic farming. But I think just the hands on made it really tangible and real. And so that was the strongest motivation for then actually making significant lifestyle and consumer change, (FBC-14).

A few participants mentioned formal education as being a significant source of their learning. University courses about sustainability provided background information on resource management and the impacts of human activities on the environment. These types of courses also opened participant's eyes to the interconnectedness of society, the environment and economy. A further discussion of formal learning outcomes can be found in section 4.3.1.

4.2.2 Communicative Learning

Communicative learning is more abstract than instrumental learning, in that it involves understanding “purposes, values, beliefs, and feelings....it becomes essential for learners to become critically reflective on the assumptions underlying intentions, values, beliefs, and feelings,” (Mezirow, 1997:6). Communicative learning is “learning to understand the meaning of what is being communicated. Communicative learning involves at least two persons striving to reach an understanding of the meaning of an interpretation or the justification for a belief,” (Mezirow, 1997:6). Communicative learning is often transformative, or represents the learning experience that sets an adult on the path to transformation of normative ideologies. Some answers represented much critical reflection on the reasons underlying their purchasing decisions. For example, when asked about their reasons for supporting organic food producers, one participant had the following to say:

Well I think that my understanding of organic food and organic farming is that behind that label there's also organic practices or lifestyles, right? So, something that respects the earth, obviously organic you know means cultivating food without any chemicals. So I think that when someone has

made the commitment to grow food organically they've also made the commitment to protect the land, protect the community they live in. Obviously the people around there as well, so there's a whole lifestyle that goes along with the label and it's not just fat-free kind of thing, there's a whole lot more to it. I think that it goes into having a deeper understanding of our relationship with the earth and our natural resources and basically it comes down to being able to responsibly manage the natural resources that you come across or that you have in your surrounding area (FBC-02).

Many of the participants validated the importance of discourse by referring to conversations with their peers, or specific people that were very influential in their lives:

...my friend has been an incredible source of information, a wealth of information always. *(and from later in the interview)*.....we don't question, we don't analyze. We just take things at face value. Like normal everyday citizens right? Where does your food come from? It comes from the Co-op, it comes from Safeway, and maybe in the summertime it comes from the market, but that's as far as it goes. And where I learnt that along the way? I don't know, I don't know. You're going to have to look up (my friend), have an interview with her too (FBC-02).

Table 5: Communicative Learning Outcomes Related to Consumption of Organic Food

Primary Category	Secondary Category	Tertiary grounded categories
Communicative Learning	Insight into one's own interests	Consumption patterns Relationships Re-evaluation of ethics
	Insights into the interests of others	Recognition of shared or differing values
	Communication strategies and methods	Sharing of knowledge
	Social mobilization	Design of dialogue opportunities Popular education

Sources of Learning

The main sources of communicative learning identified were dialogue and ideological influence (peers, family, friends), and certain experiential learning episodes

(i.e. personal health issues). FBC-12 does a lot of personal research on organics, seeking out websites, newsletters, or e-newsletters for information. She also did a directed readings course in University where she studied the history of organic food in Canada. TMF-08 said a personal interest, as well as her involvement with the NDP, have led her to learn about organics. She is vegetarian, and so when she had more time (and less children), she delved into different foods, exploring organics and a meat free diet. Trying to find a healthy balance taught her a lot about the food systems. Many of the people I interviewed were originally exposed to organics through seeking information about specific diet needs or preferences, such as vegetarianism or gluten allergies.

We very often come to conclusions about our thoughts through debriefing events with others. Discourse, as used in the transformative learning literature, refers to dialogue between people that is devoted to making sense of our experiences. "We engage in discourse to validate what is being communicated. Our only other recourse is to turn to an authority or tradition to make judgment for us," (Mezirow, 1997:6). It makes sense then that dialogue came up in many interviews. "A lot of it is word of mouth, and just talking to people in the industry, that have a lot to do with it, (MLOO-2)" TMF-05 cited friends, as did TMF-08 who told me she relies on friends to search out the information and then pass it along to her, "...they shoot the information to me, and then we discuss it. 'What should we do now?' So, probably now, friends. Initially I had this cookbook...that was probably one of the strongest sources of the information that I got into when I first became vegetarian and tried to make sure I had a balanced diet." FBC-07 says she learned about food issues and organics in particular in an informal way, mostly from friends and vendors:

I think probably a lot of talking to people. Just being involved in community groups, when I was in high school I was in a group “Youth for Social Justice,” so we were pretty socially aware in that sense – about environmental problems, and social issues and things like that, and you have a lot of people in that circumstance who are vegetarian or vegan and food issues come up, whether you’re having a potluck and things like that.

FBC-10 spends a lot of time talking to other people who are growing organically. FBC-13 said that he has learned mainly through dialogue with others: “I did a little reading of some of the organic standards in Canada. But yah, dialogue with others is mainly how I learned.”

The employment experiences of participants were also influential. MLOO-10 worked at a natural health food store, spurring on much of her learning. FBC-05 has learnt most of her knowledge through farmers, being involved with COG, and her staff position at FBC:

a lot of my work incorporates both field work, and learning by doing it, but also connecting with a lot of people that are great resources in the area, not necessarily just farmers, but maybe other people working in NGOs that are interested in supporting organic foods, and also having the opportunity to do a lot of research myself and have it relate to my work. That’s been really important. That’s been a lot of the learning sources for me.

FBC-08 learnt a lot through WWOOFing, after which he worked on a little organic garden that ran a CSA north of Belleville for half a season: “so either working with people who ran organic farms, or just in chat sessions with other WWOOFers, and doing my own not so intense interview process.” FBC-09 also credits WWOOFing with teaching her “a fair amount of things. Through speaking with farmers themselves, and friends who were involved in farming. Just creating networks.”

4.2.3 Transformative Learning: Eight Stories

In addition to instrumental and communicative learning outcomes, there were also transformative learning outcomes, as revealed through the following stories. Of the forty-three interviews I conducted, 8 participants identified a dramatic transformative learning experience that immediately changed their frame of reference and that was specifically related to food.³ Of these participants, 5 were vegetarian, and they had all taken part in some degree of vegetarianism or veganism. In analyzing their profiles, I was interested in what organic farming meant to each individual, and how they learnt about it. I found a similar mentality of lifelong learning in them. These people had broad worldviews and were open to change and new experiences – always seeking how to improve themselves and/or the environment. Most importantly, I was interested in whether or not these people, who reportedly had transformative learning experiences, had lifestyles and occupations that reflected their values, whether they shared their knowledge, and how they contribute to sustainability on an individual scale and social scale.

MLOO-05

MLOO-5 is a male Baby-Boomer with a University education. He is self-employed in the knowledge sector, and a familiar face at the market every week.

He first heard of organic in 1960 through materials put out by the Soil Association, but it was not until 1972 that he began to eat mainly organic food. He estimates that his family eats approximately 95% organic food. To him organic farming is farming that conforms to the standards set by organic certification bodies. It is also done in a humane and ethical manner, and preferably done locally. He and his wife are

³ Only seven profiles of the eight follow, because FBC-02's transformative learning experience was previously discussed in section 4.2.3.

vegetarian, and his lifestyle and occupation seem to reflect his values. I asked him what happened in 1972 to cause him to begin eating organic:

I had an epiphany. I had an epiphany in 1972 where I suddenly realized that food was important. Because until then, there was food I liked and food I didn't like, but I didn't realize how important food was. And I suddenly realized how important food was and then I realized that I could actually change who I am by what I eat, and then through changing who I am by what I eat I realized that I could change the people around me, and the society around me, through both what I choose to serve people and through the way I choose to buy food. And so I realized that there was a significant ripple effect both through individual choice, and then I started doing restaurants to try to ripple that out further. And now I believe that the ability of society to transform positive ripples into business as usual is more than I ever suspected. I'm thrilled to see organic food in supermarkets, but the being thrilled is very much mitigated by the kind of crapola that people are buying as organic. Anyway I am maintaining my positive attitude.

So, can I ask what caused your epiphany?

It was a meal I ate...it was just one of these things where I was a bit of a gourmet at that stage in my life and I went to a macrobiotic restaurant in Paris, and had what I thought was the worst meal I'd ever had because it was so bland and boring and un-gussied up. And then 24 hours later, well actually less than 24 hours later I felt really good. And I realized that, in fact, the food that I had eaten was what was making me feel really good, and the fact that it wasn't sort of lavishly prepared and seasoned was in fact part of the reason it was good rather than a drawback. And for me, at that point I was much more interested in doing flamboyant and delicious things with food and the idea that plain and simple food from good ingredients was in fact the best way to eat was a bit of a revelation.

Thirty-four years after this transformative experience, MLOO-05 works for environmental and social justice initiatives both locally and internationally. He is heavily involved in his community, and believes he owes it all to organic food, claiming it has changed his perspectives about the conventional food system, as well as revealed other environmental issues of concern to him over the years:

It's made me unconventional. In that I don't - there are many things that are sold as foods in conventional stores that I long ago ceased to look at as being fit to eat. So I can walk by a whole load of things in a buffet and I don't even see food anymore, at times. And I'm adapted to buying or

trying to buy organic food to the point where I tend to, when I go into a conventional store with conventional food, I see pockets of real foods amidst a desert; it's sort of like I see oasis of organics within a desert of conventional.

.....It's revealed other environmental issues of concern to me. But they tend to be macroeconomic environmental issues. So I'm more concerned with the subtle shifts that have taken place. When I was in my teens, nobody would have dreamt of eating bread that hadn't been baked fresh that day for instance. And you didn't have to be a health food freak to want bread fresh that day. That was just the way - every community had at least one baker who baked everyday freshly. So I'm aware of the kind of pressures that the conventional food system has put on agriculture and the food processing and the retail industries. I'm really concerned about the globalization of food and what that means in terms of energy consumption and transportation and refrigeration and pesticides, as well as flavour. So I started from a perspective of flavour and freshness and have ended up being a kind of whining environmentalist.

Purchasing organic food has also influenced his decision making process over other consumer choices.

Has purchasing organic food caused you to seek out further information about other consumer goods?

Yes. I buy, I'm constantly aware of pesticide loads, of farming methods, and increasingly I'm less interested in simply organic, and more interested in organic and fair trade, and I'm disappointed there's so little emphasis on domestic fair trade. Canadians seem to be...well European peoples, whether in North America or Europe, seem to be quite adapted now to the idea of fair trade. But, yet, fair trade for the farming community in their homelands is not something that really seems to have hit home. So there's a lot of people who are buying their morning cup of coffee because it's grown by cooperatives in Mexico, and grown organically, but at the same time their hanging their agricultural community out to dry economically. That's something I think about all the time and try and figure out what I can do that doesn't just involve buying organic cotton that was farmed by slave labour in china. But I still buy. I mean I'll still buy organic cotton because it's better than the alternative, but I would like to buy organic fair trade cotton from domestic sources, if I could.

MLOO-05 represents an individual who is making consumer and behavioural choices that are based on a critical analysis of the current economic system in which our food system is couched, and that stem from incremental learning about environmental

and social issues over decades since his original transformative learning experience related to food. In responding to the reasons why he purchases organic food, and why he does it through the market location in Charlottetown (specifically the Island Sunshine booth) his response shows critical reflection and awareness of his actions, autonomous and responsible decision-making directed at fostering a more sustainable society:

To make the world a better place in a kind of macroeconomic way through supporting people who are respecting ecological boundaries, who aren't postponing costs onto future generations, who aren't creating food through pain and suffering of either other species or migrant workers. However as organic becomes increasingly mainstream and international I have more concerns with the fact that you can still farm according to organic standards while still abusing people and the environment to a certain degree. And mainly because it's tasty good and healthy, and as someone who is interested in food, I like tasty good and healthy.

It's a concentrated way of interacting with people who are concerned with food quality, food security. And it's a community hub in other ways as well, and partly because it's being sold primarily by those people who produce it directly, so there's fewer steps between the producer and the consumer. I like to shorten that supply chain as much as possible, which establishes a greater value chain for the producers, so if I could buy at retail prices from producers, then I could put more money in their pockets, and they're not going to go out of business and it'll perpetuate a cycle of organic growing and relative prosperity.

In the off season ML00-05 is just as committed to eating organic food, though it is harder to access it in PEI during the winter. To meet his food preferences in the off season he does a small amount of freezing and canning

...mostly I try to eat local foods that keep. So in the winter I would eat more root crops and squashes you can store and so on, and more grains and beans. But being a more modern kind of California-diet kind of guy, I also do eat things like lettuce and so on in the winter as well, to a lesser extent, and those I would tend to get either from greenhouse operations or organic growers in warmer climates who ship it in.

MLOO-5 shares his knowledge about organic food as much as possible. In this individual the change in his frame of reference has been long-lasting and has had an

impact on society at a broader scale because of the activities he has both initiated and participated in:

Yes, I ran organic food restaurants, and a catering business for rock and roll bands and film crews. So over the years, I've done restaurants in the UK and Canada and in the USA. And I've done food coops in Canada and the USA. I'm not so much of an advocate and a zealot these days, but I do, I try to assist with the spread of the message about organic food by assisting with the development of cooperatives that are working in that field. So rather than doing it as an individual I try to work with organizations that are doing that. I also regularly take people to good restaurants and expose them to it.

When asked what he feels the best way for people to learn more about organic food is, his response was:

You are what you eat, so I think the best way is probably for them to eat it. I also think the best way is for them to have a relationship with the producers of the food, or to do what I said before and narrow the gap between the producer and the consumer as far as possible, and to increase the value of food dollars going to the producer, so that they have a healthy and prosperous production community that's going to be able to do things right instead of do things cheap.

MLOO-10 and MLOO-11

These two participants happened to be a married couple, although I interviewed them separately at the market. They are Generation-Xers, and both possess University degrees, with the man holding a Masters. He is a Professional, while she is a Mother, staying at home to raise their children. While this description could be that of any young nuclear family, (and if appearances tell anything you would never think they were anything else), there are some major differences here that separate them from the norm. They live off the grid in a home they built outside of Charlottetown, and they are both vegetarians. Their lifestyle and occupations seem congruent with their stated values. To

them, organic farming is done without pesticides and added chemicals, is done in a sustainable manner, and as close to home as possible.

They both felt that eating organic food has changed their perspectives about the conventional food system and they both have had transformative learning experiences related to food. Like MLOO-05, MLOO-10 and MLOO-11 are examples of individuals who have experienced lasting changes in their frames of reference that they have shaped their consequent lives around. The woman's experience, which was perhaps not as epochal as the man's, took place in 1991 when she got a job working at a natural foods store in Chicago:

I think that again all stems back to being in Chicago and being around so many people who had a different lifestyle than I did. I got to read the Wholefood Bible. That was given to us as a cashier, I got to keep a copy of that. As for learning more I think probably that was the defining moment. Things obviously have changed more over the years, but....

MLOO-10 purchases organic food for personal and family health reasons and then for environmental health reasons. She expressed a common sentiment in wanting to know where her food comes from: "I like buying directly from the farmer. I like to know where my food is coming from. I've gone out on farm tours there, it's nice to actually see it all happen." She is still constantly learning new things about organic food – through dialogue with others, and through reading magazine articles and other literature. When asked if she has initiated or participated in any activities related to her knowledge, she pointed out that their entire lifestyle is aimed at making sustainable changes. "It's sort of our whole lifestyle I think, but now with small kids I haven't been getting involved in a lot of extra things like community activism." Despite her not being presently involved in community activism as she pointed out, she is still fostering a more

sustainable society by reducing her carbon burden on the environment by living off the grid, eating local organic foods, and by providing an example for other people. “As far as our purchasing things, it doesn’t just go with foods, it goes with soaps and detergents that we use. It’s branched out into more areas.”

MLOO-11 also began to learn about organic food in 1991 when MLOO-10 started working at the health food store. “That was fifteen years ago when we started, we are always learning new things.” He shares his knowledge on a regular basis with other people because he, “for lack of a better phrase, like to spread the word. And try to influence people to feel like they want to make those decisions too.” When I asked him how his wife starting to work in the natural food store influenced his perspective or worldview he showed that it had also helped him to develop an environmental conscience that he had not possessed before:

Just through that being educated about the environment. Part of it too went hand in hand with becoming vegetarian. So at the same time we were doing that we were trying to eat more organic.

What made you decide to become vegetarian?

For me there was a defining moment. Reading John Robbin’s book *Diet for a New America* That was a big turning point for me. From there I just became really interested in the environment and in food and how it relates to the environment.

I asked if this new information had translated into him seeking out further information about other consumer goods and he agreed it had, “Oh yes, for sure. I don’t drink coffee, but like chocolate for example. I am more likely to buy fair trade chocolate now. And clothing. Just all sorts of things like that. Just to think where it has come from and what methods and processes they use to manufacture it and how it arrived at its destination.”

When asked what she thought was the best way for consumers to learn more about organic food, MLOO-10 responded:

It's a tough one, because so many people have to be ready to hear the information, and if they're not looking anywhere, they won't see it. But I think I would like to see more and more people buying straight from the farmers and finding out where their food is grown and taking an interest in that. I'm not sure how that happens.

MLOO-11 finds the prevalence of promotional materials in mainstream places like the Superstore to be promising. He pointed out that free magazines are a good way to reach people because they will have a tendency to pick it up because it is free. The local Superstore holds cooking classes and information sessions about their produce as well, and these are a great source of information for people who want to learn more.

FBC-04

FBC-04 was my youngest transformative learning example, and in Generation Y. She is an interesting example in that she grew up in a very alternative way. She is one of seven children who grew up in a rural setting where they were home-schooled for their entire elementary and secondary educations by very religious parents. Their life consisted of a lot of contact with the outdoors and experiential learning. FBC-04 left home when she was seventeen and has not attended University. She first heard of organic food when she was seventeen and started working at a whole foods bakery and there were a lot of organic products there. She is vegetarian and eats organic for health and for ethical reasons having learned more through personal research, dialogue, and experience: "The health part of it was mostly through places I worked and people I was influenced by, and from personal research after I was interested. Just learning on my own and wanting to know more. And the ethical part of it is mostly from things I've read and just through other life experiences." Despite her small income, at least seventy-five percent of her diet is organic. Intentional communities, centred around food, are of great

interest to FBC-04, and we had many long talks aside from the interview about the promises and pitfalls of community living. She lives in a communal household in Ottawa most of the time, and spends her holidays traveling and WWOOFing. Her lifestyle and personal behaviours are very much in line with her values, however her occupation is somewhat incongruent and causes her much guilt. FBC-04 is the cook at a Seminary. She is responsible for providing all the meals for the seminarians who tend to prefer a diet very different from her own. This causes her despair and she does what she can to provide them with healthy options. She shares her knowledge when asked, and volunteers within her community:

...when people ask me I wouldn't feel right to withhold how I feel about it. I don't go after converting people, unless we start talking about it. I often run into people who have different diets than I do, especially in my job as a cook, because I'm cooking for people that have different eating habits. So it's just one of those topics that usually comes up, and I'll be open about it if people do want to know or are interested in learning more.....I want to live on a community farm. Well actually yah, when I go WWOOFing I volunteer all over the place. On CSAs and different people's places. I also volunteer at a community garden in the city.

When asked what influence organic food has had in her life – and whether eating it has changed her perspectives about the conventional food system:

It's completely changed it. In every way. From taste, to feeling healthier, to feeling more satisfaction in a meal because I know it's ethical, it's supporting local people, and it's not being trucked from all over the place and all of those reasons. It's more expensive so it makes me appreciate it more and be more aware of it. It has made food become a central part of my life, especially through meeting other people that are into organic food, and living in communal households where we cook together and go to lots of potlucks and social events that have food in them.

Similar to MLOO-11, FBC-04 credits her changed frame of reference in regards to food to John Robbin's Diet for a New America, and to a Muir walk experience for her commitment to the environment:

Watching "A Diet for a New America" was a big one. The video. I tried to read it, but I couldn't get through it. The chapter on the meat industry is so disturbing. It's really really good. I think if more people read that I think there'd be a big change. That and I saw this dramatization about the life of John Muir. I was doing a wilderness survival course, and we had trekked to the top of this huge mountain. On this guy's wilderness preserve he's got 1250 acres. So you could see in every direction this land that he had he's made into a land trust, that he protected, nothing could be done on it at all for 999 years. So we had this beautiful view, and we watched the sun go down and had dinner, and then he put on this dramatization. He was so incredibly good, it was like he became John Muir, he morphed into him. It was an hour and a half long. He even cried at the sad parts, like when John's wife died. And it was first person, and it was so good and we were all spellbound and crying. It was just one of those magical moments and he was just so strong about John Muir's life and his reasons for how he'd lived and what he'd done. And for the spiritual side of it too, he really talked about that. He really imbued it with a spirituality which I guess John had been really influenced by. So that was probably one of the stronger moments for me.

The best way for people to learn about organic food is through having to eat it according to FBC-04. "I think a lot of food people eat in general should be taken off the market. And there'd be less food choices that are so shitty and unhealthy. I don't know, that's a tough question. Some people, you're just not going to get through to them, I don't think. Unless they have to change."

FBC-05

FBC-05 is a Generation-Xer with a University education. She works in the NGO sector, and is also self-employed. Again, this individual lives a life that is very different than other people her age. She is living in rural New Brunswick, by herself, running a seed-saving business, and working for the FBC. She grows most of her own food, and

99% of the food that she purchases comes from farmers within her own community. Any dry goods she needs come from Speerville Mill which sources from Maritime producers. To her, organic farming means many different things, and given her position as organic agriculture coordinator, it is understandable that she has a very holistic viewpoint on it:

If you look at it from an ecological level, in terms of biological processes and things it means working a lot with nature and seeing human activity as part of a greater cycle, of energy flow. And it's looking at how we can provide ourselves sustenance from looking at how all those things link together: humans, water, soil, microbiology, air, sunlight, forest systems, all of that stuff. So organic farming is really, to me, more of a holistic perspective on food production.

Although she grew up with somewhat of an environmental conscience, her major learning regarding food – that she now centres her life around – did not take place until she did an apprenticeship on an organic farm in Southern Ontario after University:

Well I think all through my youth and childhood I really had a natural sort of affinity towards being outdoors. Growing up we went to our cottage in Northern Ontario all summer, and my parents encouraged me to be outside as much as possible playing and what not. But in terms of getting me towards organic food, I think probably the apprenticeship that I did on the farm in Ontario. I worked at Everdale. We built the composters there based on permaculture design. I would say definitely the apprenticeship had a huge....After that I was like well, that's just the way it's got to be. I don't really have much of a choice now. Cause you can't learn something and then just shove it aside like that, and just ignore it. I can't anyways. Oh great, now I'm going to have to farm, and be dirty, eat my own food. It's actually pretty good.

She admitted that when she first heard of organic, in her early University years, she began purchasing it because she knew that there was something better about it, but that it wasn't a fully educated purchase. "I do remember having conversations with people about, you know, being a university student and trying to make food choices that were more sustainable, and often people said "well I just don't have the money for it, I can't

afford it.” And I always kind of said to myself I’m not going to let that be an excuse for me and so I made it a priority.” Most of her learning related to organic food has come from growing it herself, and from working on farms and talking to farmers. Her experiences have transformed her worldview, and she is a role model to many in how closely her lifestyle and occupation align with her values. While her work is so local in nature – it is not done without reflection on the global picture:

I think I have a stronger support for local economies. Definitely. And I see, every time I plant a garden, or eat some of the food that I’ve grown, I see it in a global perspective, where now that I’ve chosen to take a little square of land and feed myself from it I am in some roundabout sort of way perhaps empowering someone else to make that choice. As opposed to some farmer in South America having to provide me with food that I could have grown myself. Now that they don’t have to do that. I know it’s all done through plantations and large scale agriculture and its more businesses. But you know, maybe they didn’t have to hire one more person, and maybe someone could have found a job somewhere that now that they were producing food from their kitchen garden they didn’t need as great an income, or they were eating better or something. I don’t know. I just kind of have that particular view that I see my actions in more of a global perspective.

FBC-05 shares her knowledge on a daily basis. She is involved in various sectors of the NGO community, and most impressively, has initiated and received funding for an Organic Agriculture Apprenticeship Program. This program has successfully taken her own individual commitment to organic agriculture and sustainability, and transferred it to a societal level where it has touched and inspired many people:

When I first came to FBC, I WWOOFed for 3 months and then decided that I really did want to be more involved in it, and so I went back to Ontario and was an Apprentice on a farm out there for a year. That experience in the Apprenticeship really emphasized the value to me of experiential learning. When I came back to FBC...and saw that there was a desire on the farmer’s side to have people help and they had such a vast amount of knowledge and skill. And then Interns and WWOOFers coming through, and their desire to learn and be involved. I saw these two things, and I was like, well this apprenticeship program that I was

in...could happen out here. How could we make it happen?...Designing an apprenticeship program that supports our local farms and creates a unique educational opportunity for potential or upcoming organic farmers, as well as integrating a lot of the organizations in our area that work in organic agriculture in different ways. Like having the Community College brought in. They had an Agriculture Program, but they didn't have an organic agriculture course, so by asking them to be involved it really inspired them to develop a course curriculum. So now it's really expanded, or modernized I guess, their program. So it's helped build their capacity. We're working with the OACC at a research level where they're helping farmers and apprentices design and implement on-farm research projects. The Ag centre is also getting more direct links with farmers that are a bit more on the innovative side, in NB. So it's certainly helping them out, and they're also finding out what farmers are really interested in rather than picking random ideas out of the air. They're saying oh, we know farmers are interested in pastured pork because Murray Bunnet's doing it right on his farm, right? So that's really amazing. And then of course having our provincial organic agriculture specialist from the Dept of Agriculture being involved he's got lots of contact, he's got great resources in his department. But then again he's learning a lot about what the upcoming farming community in NB could look like. So it's really creating a lot of connections for people; bringing a lot of folks together, but at the same time actually farming, actually doing it. And giving people the chance to do it who might not have had it before.

Perhaps because she's worked so hard to live by her own values, or because she's worked so hard over the years advocating an alternative lifestyle, FBC-05 now puts much of the onus on the consumer to learn about organic food:

You know it's really so much is dependent on the consumer's own initiative to educate themselves. Like you could say how much information could I spread out there? How many pamphlets do I have to put in mailboxes, or workshops do I have to organize, or doors do I have to knock on, and all that stuff? I think they need to make it a priority in their; people have to become conscious...but how do you do that? I know, it's such a tough question. For me it came so much from doing it myself and being with other people that were enthusiastic about it and had information and energy they wanted to share. Talking to farmers, working with them, going to farm markets, talking to people there. Looking at labels on food, but, you know, you can't force someone to do that. So I don't know, what's the best way for them to...You know when I was living in Belize there was an organization that was trying to empower people around taking care of their river and bringing up the notion of we all live downstream, we're all responsible for each others health. One

person pollutes, and twenty people have to drink it down there. But they found that people weren't really getting it until they had a massive gravel mining operation way up in the headwaters that just flooded and muddied everyone's water supply. The water was taken away from everyone. You know it cleared up eventually but they were like whoa...this is really true. So that kind of concept where they didn't appreciate or understand it until it was taken away. I wonder if consumers need to have transportation corridors cut down and cut off for a year so that they weren't getting food on a daily basis or had access to the Superstore and that. I wonder if that's what needs to happen. Should I go and lie in front of the transports on the trans-canada? No, don't deliver the food, make people grow their own gardens! So, I don't know. How do you make a lasting impression?

FBC-08:

FBC-08 is a Generation-Xer with a University education. He is employed in the NGO sector. To him, organic farming is growing food in a way that the land is respected. He sees organic farming as a model for how we should do everything: "I think my reasoning for supporting organics is not a personal thing. It's a grand scheme, that being how we need to start doing things or else it's not going to work." Most of his learning about organic food came from WWOOFing, and from doing his own "not so intense interview process."

He is a vegetarian, and was vegan at one point. His current lifestyle and occupation reflect his values, and are the results of his transformative learning experiences that took place within the last six years. It seems that unlike some of the others, there was nothing in his early life or education to indicate the path he would ultimately take to this point. He worked as an engineer and took a very objective approach to things until two very significant experiences in his life occurred that were not specifically related to food. Learning about food was part of the changes that took place:

I didn't know too much about the foods system, but because that's something that is so deeply connected to you, you always sort of assume well that must be okay...my conversion to at least being concerned about,

or my awareness of organics sort of came along with a whole lot of other things. It was part of a much bigger change in my life.

FBC-08 shares his knowledge and in certain circles – because of where he works – he is seen as an “expert” on the topic of environmental issues and food. “I’ll go home to a dinner party at my sister’s place and all of her friends are asking me questions about their gardens in the backyard, and composting...But I’m honoured to share my level of knowledge.” He’s promoted the idea of organic gardening as part of climate change reduction actions through his work.

FBC-08 attributes his transformation to love. He fell in love and it caused him to reevaluate who he was, and the beliefs he had held up until that point, “I think it was my categorization of religion and all things spiritual as something that I didn’t need to reconsider. For me that was the barrier I had to get past. At that point I had quit my job, moved back to Canada, there were a lot of changes happening all at once.” He suddenly had more time in his life to read about things that interested him. It was when he decided to take a physical cleanse that a new way of looking at food was developed:

So I did this 7 day cleanse. And part of it said that you could have fish or white meat, but I thought if I’m doing these shakes and everything, let’s make this a full-on vegetarian cleanse. Then after that I opened up my mind to the fact that you can survive on just vegetables. Let’s see how far we can go with this thing, because it seems right. At least it did to me right then. Because at that point I was striving for perfection. It wasn’t until I actually took my first Vipassina course and I came out of Vipassina and I let go of some of my rules rather than turned on new ones. Because I go there so tight. That for me, Vipassina will define my, what I experienced in Vipassina really defined my view of transformative processes.

When I asked him if he could pinpoint a specific moment that made him care about environmental issues, or if it was part of incremental learning he told me about the same time in his life, when after quitting his job, he was working for his father in his

warehouse. Being accustomed to working in an engineering design environment where you're constantly thinking, thinking, thinking, he found his mind going all over the place while doing manual labour:

At times I would find one particular thing and just sit there and dwell on it to the point where I was driving myself nuts. I couldn't force myself to stop thinking about something. Just that manual labour was very therapeutic, it started opening things up. In a certain sense I started observing my own mind. It makes you realize you are just part of this thing that is....this one day I was listening to a Smashing Pumpkins song. And something shifted. I sort of sat down on the ground and I just got it. It's been an adventure since then. That was January 20th, 2003. Twentieth, because the very next year, on almost the exactly same date I went on my first Vipassina course. And I've been going every year since.

FBC-10

FBC-10 is a Baby-Boomer with a University education. She works in the NGO field. Organic farming to FBC-10 is a way of growing food and other products that focuses primarily on good soil management. She has eaten organic food for most, if not all, of her adult life. She first heard of it through the Soil Associations promotions in the UK, where she grew up. She grows as much of her own food as she can, and has many reasons for eating organic food:

I want to be as healthy as possible, I want to be involved in good land management. I want to, from a land up, I want to respect the land that's growing my food, I don't want to put poisons into the ground. That's from a land perspective, I want to be a steward rather than an extractor. From a health perspective, I have a family, and I'm running a centre where as much as possible we try to give people good healthy food choices.

Along with the FBC staff and interns, she does a lot of canning and freezing and bottling of food for the winter. She is very active in a number of organic organizations. The FBC also has the Organic Apprenticeship Program, and is a member of the Atlantic Canada

Organic Regional Network (ACORN). They also have an international program supporting the viability of organic markets in Mexico.

Compared to many, FBC-10 has led an alternative lifestyle based around environmental activism, involvement in NGOs, and an unweilding commitment to sustainability. I asked her about where this interest had come from – and she related a story of a transformative learning experience that changed her entire frame of reference about ways of looking at the world. This resulted in her having a greater interest and commitment to the environment – and has played out in her own life, reflected in her years of experience with living in intentional communities, and to her current home at the FBC.

When I first came to North America...I came and worked on a Shoshone reserve in Nevada, and I hadn't been there more, I was fairly fresh from England, I hadn't been there very long when the community oven, a propane oven blew up in my face. I had lost pretty well all my features, I was, I had third degree burns all over my top half, from my shoulders up. And the local hospital wouldn't take me in, as I didn't have any money to pay them, so I had to come back to that reserve, and they kept me underground for at least two months, and treated me with herbs and berries and chanting. And then I realized how much of their world was connected to nature. Everything that was my treatment was either herbal, or signs - they heard the coyote bark or whatever it was, and that meant that it was time to give me a different type of treatment. And I'd never been exposed to anything like that, or even thought of the natural world as a healer. And so having that experience, where I entered into someone else's mental training, we don't get that kind of training in the white world, so I saw how other people approached things and that really started me off realizing there actually was a whole world out there that I had not yet explored. It was pretty, it was definitely a transformative path at that moment in time.

The transformation of FBC-10's individual ideology led to her path of interest in sustainability. This individual path has had a large impact on a social level through the various volunteer work that FBC-10 is involved in, as well as being the vision and the

driving force behind the FBC and all that it has accomplished. She has had a huge impact on contributing to sustainability on a social level through providing experiential learning for many young people at the FBC and everywhere that it reaches – including both the local communities, and international partnerships:

We feel is that there is a lot of talking about sustainability or environmental, or ecological practice. And we have taken the philosophy here that we need to be doing everything that we're advocating. And so in that doing, a lot of people come here and they're straight out of university and they haven't had much time to do things. So if they've been learning about something, whether it's renewable energy or forestry, or agriculture, or even community development. What does it take to actually pull it off? And so I think the things that people usually say that they've learnt here are the practical side of life. They've had a chance to cook with a woodstove, they've had a chance to work in the garden, they've had a chance to be part of a building project or whatever it is. They've seen a bit how things work so that adds a layer to their kind of intellectual, academic background. Ultimately it's mind body and soul has to kind of work together. And so many people have been in just a mind, maybe a soul, but we don't know about that. But at least a mind realm, and not a body realm, and so once your whole thing's working better, you can become more, become more full, and become more and more and more hopefully.

FBC-10 thinks conventional agriculture is an excuse for farming, sustained only by subsidies. "It would be finished as a viable economic enterprise if it didn't get so many government subsidies. And organic agriculture almost gets no subsidies." She pointed out the positive attitude that seems present whenever you have a group of organic farmers together. I also noticed this in all my interactions with organic farmers over the summer. Though the work is hard and long, they are a happy and content bunch, and I think it stems from the fact that they are living according to their ethics. They are protecting the earth, promoting community and sustainability, and providing healthy tasty food for themselves and others:

...if you go to a regular agriculture meeting it's always a bad news story, the prices have dropped, the inputs have...whereas if you go to an organic agriculture, everybody's super keen, you know, "my carrots did so well this year." You know, I think it's the more you can support the transition of regular farmers to organic the better, the healthier soils we'll have, the cleaner water. It's the whole system importance. Not just eating healthily. We're all living on this one planet. And where do all those poisonous chemicals go? Into the groundwater, into the streams and rivers, and we have a responsibility as the human species to not foul up our home...We have to get off the biocide way of solving all problems with a dose of medicine, or poison or whatever you want to call it. And look at whole system management, doesn't matter if it's in agriculture, fisheries, forestry. We've not paid attention to the land upon which we depend, and we think we can have the quick fix at all times. I think agriculture is kind of where it all begins. Everybody has to eat, so agriculture is the most important base from which all other things stem.

Since food is a basic need of everyone, I asked her if she thought of it as a window onto the sustainable consumption of other consumer goods for the general public. If she felt it could raise the public's awareness about the environmental and social impacts of consumption:

Well, I would think that once a person gets onto buying and thinking about organics, then it's sort of a step on the ladder towards sustainability in other realms. It means you've made a conscious choice to support something and not support something else. Then I would think that it would lead you to, you'll find that the more people that are buying organics, they're making more conscious choices.

4.3 DISCUSSION

As Sumner has argued, eating is a pedagogical act (Sumner 2006). It is the daily interface between humans and the environment; something that none of us escapes. As such, we can look at it as a significant learning tool. The learning that takes place informally and in adult's daily life is some of the most important there is. We are also at a crucial time, with a number of related factors reaching a peak. Environmental problems such as climate change are garnering more and more media attention, food scares are

increasing, and alternatives to conventional agriculture and processed food, once only available in the backyard of the intrepid, or on the shelves of health food stores, are becoming mainstream and infecting the foodscapes of the general public. With such new and growing options one could assume there is a concurrent learning taking place.

My data analysis revealed a few major points in the answers I received from participants. The most important point relates to my first objective – whether learning was taking place. The answer is yes. A discussion of my results can be structured around the following four points:

1. Everyone learned, whether it was instrumental, communicative, or transformative.
2. Experiential education is invaluable
3. Nature nurtures
4. Transformation of normative ideologies on an individual level, has an impact on a social level

4.3.1 Learning Outcomes and Sources

Learning amongst participants resulted in instrumental, communicative and transformative learning outcomes. With almost every single participant identifying learning related to the food system that spilled over into related topics, such as environment or ethics, it shows that food can play a central role in learning that fosters sustainability. Access to local farmers inspired customers to continue making choices that supported the local food system, and many pursued further information to support their growing convictions. Food has been traditionally tied to the positive qualities of community life, and organic farmers are therefore arguably at the centre of true learning

communities. Participation in the TMF CSA, and hands on growing experiences at FBC, allowed the participants to gain a sense of ownership over the food, and to become more engaged in thinking about the processes that put food on their plates. While this may seem insignificant – it can be the first step towards questioning the conventional system.

While much of the learning participants spoke about represented informal learning, there were also participants who gained a lot of knowledge through formal education experiences. Interestingly enough, no one pointed to formal education prior to University as a source of learning. Besides one girl who attended a conference at the Bronte Creek Project while she was in High School, all the other formal learning took place in a post-secondary setting. “At UPEI, I took a couple environmental studies courses, those just gave me a larger spectrum of what actually goes on,” (MLOO-06). FBC-03 felt that most of her learning had come through her University education, and TMF-09, who has his PhD, learned first about environmental issues, and then about organics through his studies at University:

I’ve become more informed about that as I studied in my college years, through studies of toxicology. I actually found out a lot about how pesticides and similar compounds can affect the environment and humans as well, and the types of toxicities that humans can have from them. So through that process I learned a lot more about organic, and organic farming (TMF-09).

TMF-13’s Step mom suffers from environmental sensitivity, so she has always been surrounded with organic foods, natural household and personal care products, yet it wasn’t until University that she really put it all together. In a course entitled “Introduction to Sustainability” she had the task of conducting a feasibility study on whether UPEI could be purchasing organic food from local farmers. Talking to Jim and

Sylvie about their CSA, made her decide to become a CSA shareholder, and to really adopt the principles of organics on a personal level. FBC-09 also credits her university experience with catalyzing her interest in organics: "I was really involved in the academic side of things when I was in school. So I would go to the Guelph Organic Conference. I was involved in OPIRG and there was a movement of students to put together the first organic agriculture course, and I actually took that course." Through my interviews with participants I came to realize that there are a variety of ways that adults learn about organic foods. Different learning styles probably influence what source of information the participants were attracted to. The most notable discovery in compiling the learning sources was the absence of formal learning surrounding organics and food systems at the public school level. However, this could have been influenced by the age categories of the participants. With a growing awareness of food security and public health issues, perhaps food systems will slowly make it into mainstream public education.

4.3.2 Experience is Everything – Planting the seed

It is definitely planting a seed. No pun intended. (FBC-02 when asked about learning experiences at the FBC).

The second major point I realized is that experiential education is invaluable. For myself, with a Bachelor of Education in Outdoor Ecological Experiential Education, this was both empirical evidence of an academic philosophy and a real career affirmation! The interviews conducted reinforced the power of participatory and interactive experiences in fostering critically reflective thought:

I think that when you're actually at FBC, or any place where you can be throughout the whole growing season, from beginning to end. I think you

really learn to have a loving relationship with nature. When you plant seeds that you harvested, or that you conserved from the previous season and see it grow, or you know: seed flourish, grow, and then harvest again, and then save seed again. It is a pretty amazing process. And I think you also see how much hard work goes into it. And constant maintenance that is required to be able to provide food ...(FBC-02).

In discussing whether the experience provides the same levels of discovery for everyone, the same participant stated:

Whether somebody gets right into it while they're here or not, the people who don't I think they will leave and months later will look back and appreciate the fact. Because everything in life is information and your learning accumulates along the way even if it doesn't seem relevant to you right now, it will somehow, have some relevance at a different time in your life.

This participant is speaking from personal experience given her description of what she feels was a transformative learning experience in her life. She talked about how this experience did not take hold until later:

I think Galiano Island was it....I was introduced to so many different things. And I didn't realize that until much later. But you know, hindsight is always 20/20. But I remember my boyfriend's mom at the time always made her own bread and put all these things in it, and I was like "Ewww, where's the white bread?" and she was like "Uh, Jason, your girlfriend's so ignorant!" We still keep in touch, and I wrote an email to them when I was first here at FBC. I was like, I'm at FBC, this place is organic and all I can think about is brown bread, the brown bread your mom made. And I was like please, let her know that she's had a huge impact in my life. And yah, it's ten years later, but I'm thanking her for it now. She was really touched. Shirley's bread, I hated it, I hated it. On Galiano I met people who were really self-sufficient. And because obviously the climate there, they can't grow food all year round, but they had greenhouses and it's a lot easier. People who had goats, so they had milk, and they made their own cheese, and they rolled their own oats, and canned and did everything from scratch, did everything as much as they could. To be pure, and to feed their bodies really nutritious food. I was 17/18. I spent various summers there. I spent 4 summers, (FBC-02).

This particular participant is now staff at the FBC, and works in Honduras running a women's kitchen garden project, teaching women living in poverty how to grow their own foods and be more sustainable – both in terms of personal income, and the environment.

The success of the FBC's educational programs lies in the fact that the participants experience a way of life that strives to be much more low impact than the status quo. Almost every daily activity becomes an experiential learning opportunity, from taking a shower in the solar-heated outdoor shower, to using the outhouse, to splitting their own wood for heating and cooking, growing and harvesting their own food, and eating communally. The gardens at the FBC are a successful outdoor classroom. This supports much of the educational literature around experiential learning that advocates engaging three key elements in the learning process: the head, the heart, and the hands. Many people drew links between caring about the environment and education, but none mentioned public/formal education (with a few exceptions). This has implications for the formal school system in that it is often lacking opportunities for experiential education. The only mention of a high school program reaffirmed my belief that food is a powerful educator. It was of a program in Ontario that I have been involved with in the past, and where I did one of my 5 week Teacher's College placements when completing my Bachelor of Education. I had asked the participant where she had first heard of organic food and her response was: "I went to an eco-conference at the Bronte Creek project in Southern Ontario when I was in high-school and I think I started to become very aware of food issues then. I was vegan for a couple of years after that," (FBC-09). To attend a high school conference that results in such a drastic dietary

change is fairly uncommon – and represents in my mind the success of this program in translating environmental issues into experiential learning for students. The program is called “Bronte Creek: Halton’s Environmental Leadership Program,” and actually takes students off-site for a semester to a location where they learn and cook together as well as provide experiential education programs for elementary schools (i.e. Earthkeepers, Sunship Earth). It is not often that students have the chance to spend a five month period amongst a small group of their peers in such an intense way and the experiential learning model is based on the Institute for Earth Education’s works (Van Matre 1972; Van Matre 1990). Through my interactions with the BCP and teaching there, I recognized that the preparing of meals and eating together in a way that is recognized as having an impact on further environments and societies (at BCP they eat in as sustainable a manner as possible – i.e. no meat etc.) had a strong impact on the community dynamic of the group. My experience at BCP was a personal lesson for me in how food is a common point we all share for powerful “teachable moments” - and as you can see it has greatly influenced my further studies!

The FBC is so successful in providing learning experiences that are both instrumental and communicative because it provides, like the BCP, a chance for participants to have total immersion in the experience, and then provides a forum for dialogue, or debriefing those experiences.

I love going to the garden before a meal, picking the food that I’ve been involved in weeding. I wish actually that I had been involved in the planting here, cause that was what I loved, more actually, at another farm I was working at. I was there through the whole season. So would plant things and then see them grow, and then to eat that - to go pick that food and take it home and eat it that day. I just really enjoy that process. I feel that it makes me enjoy the food more and it’s not necessarily a rational thing. It’s just I like that. I mean it is rational in some ways I guess

because I think it is better for the environment to be producing your own food locally in a healthy way (FBC-03).

A visiting WWOOFer shared her experience:

I've learned a lot. I think just the experience of seeing food grown, and harvested, and preserved, and eaten and stored, and the seasonal part of it, and the hands on, really connected hand to mouth kind of thing about it is a really strong experience. Seeing food in sort of a more natural environment than being shipped and packaged and all this stuff. And that it is growing and being eaten, and the relationship between people and their food. They're a lot more connected, like WWOOF hosts I've stayed with (FBC-04).

When I asked a local Mother and Father what they felt about the learning that goes on related to food and the best way for people to learn about organics their response again showed the importance of experiential education:

I think the most accessible form would be through small scale gardening, just because it allows you to see a full breadth of understanding how things grow. Especially for kids or students to be involved in these things would be really nice. It's very tangible. It's shown that kids that don't eat the carrots at home, if they've grown their own carrot, then they're much more interested in eating it. I think growing a garden is really, I think, one of the best ways. And then second of all maybe at least going to a farmer's market and meeting producers and getting more of a personal connection. I think those would be more of the exciting ways to learn (FBC-09).

4.3.3 Nature Nurtures

A third pattern is linked with experience as well, and has serious implications for the future when 50% of our human population is now urban; contact with nature at a young age appears to play an influential role in whether or not someone cares about the environment. Many of the people who didn't feel purchasing organic food had changed their perspectives of the conventional food system or taught them a whole lot of new information felt that way because organic food was part of a philosophy in the way they

were raised. These people eat organic food because of their connection to the environment, generally stemming from a connection to being outdoors as a child:

I think going to British Columbia to the Kootenay's region every summer and hanging out in the woods, and just getting to feel comfortable in the woods, and the mystery of it. I think that helped a lot for me to want to have that experience everyday. I went there as a child with my family every summer (FBC-14).

That quote is from the male half of FBC-14, a young couple, who met and married at the FBC. Of all the young people I interviewed, they were really living their values to the fullest extent. Aged twenty-nine and thirty-four, with two children, both have a university education, and have worked as interns and staff at the FBC. They first heard of organic food when they were in University (1991, 1992). To them, organic farming means stewardship of the land, and trying to increase the fertility of the soils naturally over time, as opposed to using chemicals. Their diet is eighty to ninety percent organic, and they grow most of their own food, supplementing it with dry goods and grain products from Speerville Mill. "In both of those cases it's connected to the joy of growing your own food and then also supporting a real business and farmers that are doing the same. It's nice to actually – it's a more intimate connection with food." Both have experience working on other organic farms, and the woman is a certified organic inspector. Much of their learning has been instrumental and comes from hands on experiences, as well as through going to other farms to inspect them. They are avid readers and are always trying new techniques that they read about. They were able to provide some insight into the learning experience interns have at the FBC and yet, the main point that came out of our discussion about what interns and visitors to FBC really learn, was an echo of what I had already been told: "I think the biggest thing is just being

in close proximity to your food. And so actually going out in the evening and picking things directly from the gardens, and then also having access to all these whole foods and learning how to cook with them is I think a really great lifelong skill.” When I asked them where their commitment to sustainability really stemmed from, they both referred back to their childhood and how they had grown up. The woman was influenced by the landscape of Northern Ontario which she visited regularly as a child, as well as through her connection to plants:

My mom always very much did her recycling, and we’d have to go out and deliver our recycling to bins outside of town. But I remember she gave me, we got these little lilac bushes and they got all these moldy spots on them, so she gave me the task. I think I might have been eight or nine I had to wash off the leaves with just ivory soap or something and water for a couple of days to get rid of the mold on them. I remember that being quite nice, that every little leaf I had to wash off. So I think it drew a connection to that plant. I’ve always loved working with plants ever since.

Having role models within our families who are connected to nature is also a strong influence that is disappearing with our continued social alienation from the land:

There’s my Grandmother, who almost everything that she’s eaten all her life has come from her garden, or come from picked in the wild or whatever. And she’s 90 and so healthy and still independent, living alone, and she’s like “I’m this healthy because I eat twelve different kinds of vegetables every day and it all grew in my garden and I never put any chemicals on it.” So there is a generation of people that are very much aware, they don’t know what certified organic means, but they know what good quality and healthy food means, so I guess that’s like the first role model (FBC-07).

As society becomes more urbanized, and the general population grows further from past generations who were more connected to the land, what will happen to the inspiration that children have drawn from their interactions with nature?

4.3.4 Transformation of Normative Ideologies

Normative ideologies dominant in a culture are the foundation blocks for frames of reference. In Mezirow's transformative learning theory, frames of reference are the underlying foundation for the way we perceive and make sense of our experiences as adults. "We have a strong tendency to reject ideas that fail to fit our preconceptions, labeling those ideas as unworthy of consideration...nonsense, irrelevant..or mistaken," (Mezirow, 1997:5). Mezirow credits the influence of primary caregivers and cultural assimilation with instilling frames of reference and habits of mind in us throughout our lifetimes (Mezirow 1997). Changing these frames of reference, or expanding them to include new ways of thinking and new points of view is what transformative learning is all about. I asked all the participants if they shared their new knowledge with others – entering not only into dialogue that could lead to communicative learning, but also spreading the benefit of their personal learning to a larger social realm. Eighty-six percent of the participants said that they share their knowledge related to organic agriculture, leaving only fourteen percent (or 6 people) who said they did not share their knowledge.

Yes. Because I think it's important that people enjoy their food and not just feel that it's an industry, that they have to go to the grocery store on Saturday and pile up a cart and push it through like a lot of people don't, have that idea. They complain about putting their groceries through I actually do work at a grocery store - but they're complaining about how hard it is to grocery shop and I'm like, have you ever grown a carrot, have you ever grown a potato, have you ever farmed eggs? They just sit there and complain, they have no recollection or no idea where their food comes from.

In what way do they complain - what are they complaining about?
Everything's too expensive, and they couldn't find - this certain thing I wanted wasn't on the shelf. Just not realizing, having no awareness of food and how it comes to be and they just think that it should be there for

them to buy and that they shouldn't have to do any work to get it (MLOO-06).

Because the idea of sustainable living is so counterculture to the dominant ideology in North America, yet so necessary for the future of our environment and survival as a species, the impact of transformative learning – despite it being on an individual level – becomes even more critical. “When circumstances permit, transformative learners move towards a frame of reference that is more inclusive, discriminating, self-reflective, and integrative of experience,” (Mezirow, 1997:5). These frames of reference are preferable in that they are “more likely to generate beliefs and opinions that will prove more true or justified to guide action,” (Mezirow 2003). What are the circumstances that permit transformative learning in relation to a more sustainable way of life? My research found that food is one of them:

I'm in a very unique position again, where we have so many volunteers and interns come through that I can try and share directly with people, and also I like to put myself in positions where I am doing more of an educative kind of thing as opposed to quietly doing my own thing. It is really important to me. And I do it because I think we have to kind of be in it together. And I've been able to find ways of making it a part of my life even when it felt like I could do things a lot easier by not making those choices. And so I really want to encourage people to see how they can be eating really tasty good meals and not spending a fortune, and spending more time cooking, and with their family, and enjoying the fruits of their labour a bit more. I'm trying to show people it's not really work all the time if you don't have that perspective. It's a matter of perspective. So if I try to share my perspective with other people, maybe they'll also see the value in supporting local farms, and growing a bit of their own food, and preserving it, as opposed to depending entirely on a food source and suppliers that come from distant lands that are really dodgy (FBC-05).

Becoming critically aware of our food system necessitates reflection on a host of social, economic, and environmental systems – at a global, local, and personal scale. Transformation of normative ideologies regarding food issues therefore involves the

consideration of a number of other inextricable factors – such as environmental issues, social justice issues and economic considerations. Mundel (2007) suggests that sustainable agriculture (we can read organic) is itself a direct challenge by farmers of the hegemonic system. If a hegemonic system is maintained through a combination of state coercion and individuals consent (Gramsci, 1971), both growers and eaters are breaking consent and calling for an environmentally and socially just form of agricultural organization (and therefore social, economic, and environmental). “Chemical agriculture is not simply a specific set of agricultural practices, but rather, is part of a much broader social and economic system that perpetuates the dominant class’s interest (corporate profitability),” (Mundel, 2007:16). This system is supported by a normative ideology amongst the North American public, as summarized in section 2.0. Given this discussion, I consider all of the participants I interviewed as taking part in a system that is counterculture to the dominant normative ideology regarding food and the attendant social, environmental and economic systems.

Impacts of Individual Transformative Learning on Sustainability

The importance of transitioning to a more sustainable society – and doing so using the tools of adult education is not a new idea. Inglis, in 1991, challenged the field of adult education:

If, in adult education, we take on board issues of praxis, transformation, and empowerment, if we accept Freire’s call to dialogical revolutionary action, then not only should adult educators begin to articulate their views and theories about the environment, but they should also start to work on how the existing relationship should be changed, (172).

McDonald recently stated that the desired outcome of human behaviour change towards the environment is “an environmentally sustainable society. Such a society can only be

realized if individual behaviour changes substantially,” (2006:280). Given that almost every single participant I interviewed expressed that they did share their knowledge of organic food with others, it is obvious that change at an individual level has a ripple effect that impacts the greater society. For many, their involvement goes beyond even the passing of information, to proactive initiation and involvement in various groups and activities designed to raise critical awareness about environmental and social justice issues. In at least 8 of the individuals I interviewed, an acute transformative learning had taken place, and in many more transformative learning took place through an accretion of experiences. Both methods of learning had a large impact on the frames of reference of the participants. This affected both the way they looked at food and the conventional agriculture system, and their consideration of environmental issues. For many, as demonstrated in the profiles in Section 4.2.3, their lives were changed, taking them down a life path that has them exploring for more sustainable ways of living, and opportunities to make a difference in the world. I think it is safe to say that the transformative learning that took place on an individual level, has translated to a social level in every case.

Education, organic farming, and environmentalism require systems thinking. Transformative learning is systems thinking in relation to fostering a more sustainable society. While Mezirow (date?) has been critiqued for being too individualistic, I argue that his theory of transformative learning is merely focused on how change happens at one systemic level – that of the individual. That change will nevertheless affect many different levels of the system or social hierarchy:

When one considers the deleterious effects of global capitalism on the environment, for example, one must not forget that capitalism cannot stand without a culture of willing consumers. Thus, the work of public/adult environmental education to bring about individual awareness

or behaviour change is an effort to create environmental and social change at one systemic level, (McDonald, 2006:284).

TL, therefore, is an integral part of a systems-based understanding of adult education (McDonald 2006). “If adult education is to contribute substantively to global environmental sustainability, a systems-based understanding is critical.” (McDonald, 2006:284-85).

CONCLUSION

And I suddenly realized how important food was and then I realized that I could actually change who I am by what I eat, and then through changing who I am by what I eat I realized that I could change the people around me, and the society around me, through both what I choose to serve people and through the way I choose to buy food. And so I realized that there was a significant ripple effect both through individual choice, and then I started doing restaurants to try to ripple that out further. And now I believe that the ability of society to transform positive ripples into business as usual is more than I ever suspected (MLOO-05).

5.0 REVIEW

The purpose of this research was to examine and understand learning among people who consume goods directly from local organic producers, and how this learning affects how they make meaning in their lives. By understanding how and why people choose to support or be involved in organic farming at a local level, and what they learn through it, I hoped to gain insight into individual transformative learning and how this contributes to a more sustainable society. Within this research context, I had the following five objectives:

1. Examine the individual learning associated with different models of organic producer/consumer interfaces;
 2. Understand the reasons why people support organic producers;
 3. Explore what this means in the transformation of individual normative ideologies;
 4. Consider potential impacts of individual transformative learning on sustainability;
- and
5. Communicate the findings to appropriate outlets within the organic and educational community.

Through my interviews, I examined the individual learning associated with the three different models of organic producer/consumer interfaces, and I found that every participant learned to some degree. Their types of learning varied from instrumental to communicative, to transformative. The models of organic producer/consumer interfaces that provided a more hands on experience such as the CSA seemed to have more impact – with the FBC being the extreme example of experiential education, and with its participants appearing to be the most deeply impacted. An interesting study would be to survey FBC participants at a milestone down the road to measure the actual lasting impact of their experience.

It became apparent that the participants supported the organic producers for a number of reasons, although personal health, environmental reasons, and a desire to support the local economy were also all important. I believe that there is a desire for the availability of more local produce, as some organic consumers begin to realize that corporate organics are undermining the local organic producers or market.

What this means for the transformation of normative ideologies is that food is a successful route to learning about sustainability. I found that participating in an alternative food economy does have an impact on normative ideologies. Food is something we all partake in, and therefore it is a rationale route to expanding a person's perceptions about the environment and what sustainability is all about. Experiential education is an invaluable tool to bring about transformation of normative ideology. Participants who had the opportunity to grow their own food, or have a connection to the farm or environment where their food comes from appeared to be more committed to supporting the local economy, and to learning more about the environmental impacts of

food and other consumer goods. They were also excited to share their new insights with other people. This led to the conclusion that transformation of normative ideologies on an individual level has an impact on a social level. The potential for related impacts on sustainability is enormous.

I personally learned a lot in undertaking this research, and I also recognized some limitations within the research – the biggest one being time. Conducting some of my interviews in the market itself meant that some participants were in the middle of completing their Saturday morning routine, or were in a rush, and did not take as much time to discuss issues as I would have liked.

My field research experience was also a real eye-opener to how many people are talking about sustainability – but how few are actually doing it. Transitioning to the type of lifestyle that many organic farmers have, and some of the participants I met had, takes a lot of courage in a society controlled by a normative ideology based on an economic growth model that favours mass production and consumption. That said, I did not meet one person who had made that transition, and wanted to go back. Sloughing off the shackles of guilt many of us live with in this consumer society really brings a sense of freedom and pure happiness that I had never experienced before. By the time I left I felt that enlightenment was the ability to find joy in eating something you've just pulled from the ground. However – despite the strength of this message at the time, I had to return home to my mortgage, and my student loan. Back to the guilt of living comfortably in an environment far removed from my agrarian forerunners. Now my challenge is to act on my enlightenment – and that is part of my fifth objective!

Becoming critically reflective of the assumptions of others is fundamental to effective collaborative problem posing and solving. Becoming

critically reflective of one's own assumptions is the key to transforming one's taken for granted frame of reference, an indispensable dimension of learning for adapting to change (Mezirow, 1997:9).

The ultimate question underlying my research in terms of transformative learning was: Can transformative learning create lasting change among learners, resulting in more environmentally-responsible decision-making? My research illustrates that the answer is yes, and the best way is through experiential, hands-on learning. The people I spoke with that had experienced transformative learning – whether incremental or immediate – had changed their lifestyle, and in doing so, were impacting the people and environment around them. Having a connection to their food and to the producers of their food, is an experience that inspired many of the people I spoke with to take their learning and consumer behaviours one step further in reflecting their values. Whether seeing the person who grew their food, visiting the farm, participating in a CSA or spending time at an institution like the FBC, the connection was a strong key:

...having a connection to their food, and to their farmers. Removing all of those middle people that...you know, if you just buy it from a package in the grocery store, you don't even think about where it came from. But if you have some kind of connection, like human connection, then that really brings it home. If you go and talk to a farmer and you realize how much work they put into it, or how hard their life is to make ends meet, you feel like you have an obligation to make a responsible consumer choice (FBC-07).

Within Canadian culture, farmers are a group of people that still have an assumed connection to the land, representing a bastion of hope for those concerned about our environmental state. Organic farmers also tend to be very community oriented. This has been supported in the literature, where Sumner found that organic farmers make a “wide range of economic, social and environmental contributions,” (2005:i). Historically,

Canadian agricultural policy has ignored the existence of organic farmers, and has promoted the amalgamation of small farms into large farms that are more competitive on a global export market. These agricultural policies have been detrimental to rural agricultural communities (Qualman and Tait 2004). Despite a lack of recognition or support at the government level, organic farmers have been rebuilding crumbled agricultural communities, reinvigorating the land, and getting young people back into farming. This revitalization of rural community is exciting because it has the potential to “improve the well-being of rural residents....small scale contributions of organic farmers can add up to large-scale development potential for rural communities,” (Sumner, 2006:3). This can be seen in the annual Fall Fair held at the FBC. People from all over convene on the site to celebrate what it means to live in a rural community. Organic agriculture has the potential to transform societies into more sustainable, caring, ethical, and environmental communities, by transforming one eater at a time. “I think you don’t have any experience - I think we’re just so far removed from anything. It’s good to meet people that actually grow food. We all have these little gardens, you know,” (TMF-12).

Agricultural countryside is a popular image in Canada – and nowhere is this image more ingrained and striven for than on P.E.I. Tourists to the Island are led to believe that it is so idyllic they may see Anne walking down a local road, swinging her basket. The fish kills from agricultural run-off, and high cancer rates from chronic pesticide exposure are well hidden from the major tourist routes, and poverty and unemployment that exist on the Island are much less obvious in the summer months when the garden province sparkles with idyllic pastoral charm. Organic farming is growing on the island, alongside demand, and it could be a major boon to the Island’s popular image

– given organic farmer’s role in revitalizing rural communities: “Their organic philosophy allows them to revive a dying rural heritage and showcase it as a vital contribution to the cultural life of rural areas. They are, in essence, living examples of the popular image of the countryside,” (Sumner, 2005:5).

Based on Sumner’s research report on the links between organic farmers and community sustainability in Southern Ontario, it seems that the situation is relatively similar to that of the East Coast:

Organic farmers in southwestern Ontario are implementing...long-term solutions by promoting small-scale on a large scale. Their on-the-ground initiatives include starting CSAs, opening farm stores, resurrecting traditional farming knowledge, joining cooperatives, engaging in barter and actively participating in a social movement that links men and women, rural and urban, North and South, (Sumner, 2005:7).

The growing popularity of Farmer’s Markets across Canada is another example of the mass-appeal of being more connected to your local community and the people who produce the food.

5.2 RECOMMENDATIONS

A recommendation for further study would be to conduct this research in a city. The area that I conducted my interviews in is still very much a rural area, and or very closely tied to a rural heritage. There was a strong importance of supporting local producers in my participant’s answers. In an urban area how would this compare? How do urban consumers feel about local? Does that mean supporting an independent grocer instead of Sobeys? Where they obviously don’t have access to farmers and a rural existence, what are their triggers – how do they learn/experience the importance of agriculture?

I found that the participants I interviewed tended to be very well educated. Could it be that those who have the good fortune of being formally educated also have the ability to access different outdoor experiences, the leisure time to read and pursue interests and spend their time cooking meals from scratch, due to income bracket or associated social values related to formal education? There could be a causal relationship to explore.

5.3 REFLECTION AND SUMMARY

In line with Sumner's (date) recommendation for better policy which champions organic farming and holds it as a bar to which farms should strive, we need congruent social, economic, and educational policy that supports a more sustainable food system. In our era, food is a powerful learning tool. It is a learning tool not just for eaters – but also for food providers. Karsten Mundel (2007), in his study of sustainable farmers in Alberta, found that a shift of consciousness took place in the farmers – causing them to want to farm sustainably. The practice of organic farming is itself an exercise in transformative learning for all participants. It is a practice that stems from a critique of the dominant agricultural system. Organic consumers are therefore, whether they even know it at first, taking part in an economic and agricultural system that results from a reflective critique of the conventional agricultural system. The challenge now is to ensure that the organic food system, as it is developing, stays true to the ethics and morals behind it, and is not co-opted by corporations looking to cash in on the growing interest in this market. This is truly transformative learning embedded in a transformative learning experience.

The research provided empirical evidence that transformative learning does create lasting change, and that in relation to sustainability that change is often translated to a social scale through the learner's initiation of or participation in local, regional, national or even international actions related to environmental and social justice issues. Every person I interviewed had begun to translate their learning into action just by the mere fact that they were participating in an alternative food system. For the eight participants who I identified as having epochal shifts in their frames of reference due to a transformative learning experience, some of those experiences took place years prior to their participation in this study, and they are all people who have since devoted their lives to popular education and action around social and environmental justice issues. Hence transformative learning can help to foster a more sustainable society. The question to answer now is how do we create and encourage transformative learning experiences in others? And I believe some of the answer can also be drawn out of my research. We need more experiential education in formal schooling. We need more people encouraging young people to get out and enjoy nature – whether it's at a neighbourhood park, or on a canoe trip, and we need those adults to commit to those experiences by ensuring they are safe and time is made for them. We need greater education around what we put in our mouths – because the food system we choose to endorse supports specific economic systems and related social and environmental systems. We are what we eat.

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APPENDIX A

(bracketed phrases represent prompts that could have been used if required)

Interview Questionnaire

Demographic Information

Age:

Gender:

Education:

Occupation:

Family Size:

Questions

1. What does organic farming mean to you?
2. Do you regularly purchase organic food?
How often?
What percentage of your diet is organic?
What types of food?
3. When (and how) did you first hear of organic food?
4. What are your reasons for purchasing organic food?
How did you learn about that?
5. Why do you choose to purchase food through this location?
Is the origin of the food a factor?
Do you consider "buying local" in making your purchasing decision?
Is purchasing local food important to you?
6. How do you meet your food preferences in the off season?
(Do you preserve food, do you purchase organic from the grocery store, do you not eat organic in the winter etc.)
7. Have you learned new things about organic food since you started purchasing it?
How did you learn this?
What was the source of the information? (news? Friends? Vendor information?
Research? Participation in community organizations?)
8. What have you learned through purchasing food at this market/from this vendor?
9. Do your friends and/or family share your interest in organic farm produce?
10. Have you shared your new knowledge with others? Why/ why not?

11. Have you initiated or participated in any community activities related to your new knowledge?
If yes: What type of activities? Why?
12. How/Has purchasing organic food changed your perspectives about the conventional food system?
13. Has learning about the organic food system revealed other environmental issues of concern to you?
If yes: Would you say this experience has changed your perspective or worldview to any extent?
14. Has purchasing organic food caused you to seek out further information about other consumer goods?
15. What do you think is the best way for consumers to learn more about organic food?
16. Do you have any questions about the survey, or any other things you want to share or expand on about organic foods?

APPENDIX B



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The Role of Transformative Learning in Fostering a More Sustainable Society: The Case of Consuming Organic in Canada

Researcher: Sarah Kerton

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Thank you for taking the time to read this carefully.

The purpose of the research is to examine and understand learning among people who consume goods directly from local organic producers, and how this learning affects how they make meaning in their lives. By understanding how and why people choose to support or be involved in organic farming at a local level, I hope to gain insight into individual transformative learning and how (or if) this contributes to a more sustainable society.

Your participation in this study will take the form of one personal interview, which may last for approximately 1-2 hours. Choosing to participate, or not participate, in this study will in no way affect the relationship you currently have with the farm. I would like to obtain a more complete understanding of why you purchase organic foods, and any effects this has had on other aspects of environmental decision-making in your life. With your permission, the interview will be recorded on an MP3 player in order to facilitate my note-taking. I will also record notes by hand. All information you provide will be treated as confidential, and you will not be identified by name in any report or publication resulting from this study. I will use a coding system in my notes to keep your name separate from the interview notes. No one will have access to your name or coded interview data other than my supervisor and myself. Raw data will be completely destroyed in April of 2008, one year after my graduation from the program.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional