

The University as a site for challenging conventional food geographies: the
case of sustainability in food services at Queen's University

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For my great-auntie Margaret, who never wasted
an opportunity to learn or to laugh.

I miss you everyday.

Abstract

In this thesis, I examine the factors that influence the introduction of sustainable practice into university food services. There is a growing body of evidence documenting the ecological impact of the conventional agro-food system. Therefore, understanding how institutional practice either enables or hinders sustainable or 'alternative' food practice is critical because institutional food services could serve as a potential site for challenging conventional food geographies. Drawing upon a case study approach, my thesis explores the food service environment at Queen's University, Kingston, Canada. Two smaller, less detailed food service cases studies (the University of Guelph and the University of Toronto) are used to compare the factors and indicators that determine how sustainability is incorporated into food services. Given the geographical variability within University institutions, I argue that university food services are a contested political space and an important site for challenging conventional food systems. They are also places to test alternative, more sustainable models. I outline some key variables that are currently preventing Queen's University from moving toward a more sustainable food service model. Furthermore, I discuss the implications of this research for the alternative food geography literature. **Keywords: food, institutional purchasing, sustainability, sustainable best practice, food systems, local food.**

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Chapter 1 - Introduction

1.1 Introduction

The food system is in crisis. Our quest for ever cheaper sources of food has prompted not only a crisis in the production end of the agricultural chain, but also a crisis in terms of the growing public alarm over increasing obesity and diet-related illness. The exigency in the modern conventional food system is a crisis on the three fronts of sustainable development: social, economic and ecological¹. While broad abstention from sustainable development stems from the private sector's resistance to policy interventions in the market, the failure of public institutions - especially universities - to become leaders and drivers of sustainability is not so easily explained. Through their purchasing and policies, universities have tremendous power to privilege particular practices over others. Critically, the manner in which they run their food services has significant potential to shift their ecological impact. Morgan (2007:2) argues that:

[T]he public provision of food – in schools, hospitals, care homes, prisons and so forth – is arguably the litmus test of a state's commitment to sustainable development in the fullest sense of the term because, depending on the nature of the provisioning, it can address social justice, human health,

¹ For a more explicit examination of the crisis in the food system, please see Appendix One.

economic development and environmental goals, the main domains of sustainable development.

1.2 The Research Problem

My research examines ‘sustainability’ in the context of food initiatives on university campuses, with particular focus on Queen’s University at Kingston, Canada. The sustainability of campus food has become an important campus issue in recent years as an increasing number of students are demanding higher quality food and are also interested in linking campus food ‘quality’ to broader ecological, health and sustainable community-related issues. This research explores the factors that influence the development and implementation of food service policies on campus, particularly those directed at improving ‘sustainability’. Recently, the sustainability of food services has become a key aspect of improvement strategies for ancillary university services and an integral dimension of food service industry best practice.²

Morgan’s (2006; 2007) research into institutional purchasing practice in the U.K. has shown that good practice is a bad traveller. The annual MacLean’s University Ranking and the Globe and Mail’s Report Card on Canadian Universities reveals that students are largely dissatisfied with their food services, particularly at large and medium sized schools. My research questions then focuses on the determinants of good practice. In particular, I ask the following three questions:

(1) Who are the universities which are actively embracing a more ecological and “sustainable” approach to campus food services and why? (2) What are the factors that enable or disable the implementation of sustainable ‘best practices?’ (3) Who are the key actors that are determining the direction of food services?

² See Appendix Three for evidence of this trend.

1.3 Methods

In this thesis, I employ a multi-methods approach to answer these research questions. I engage in academic and grey literature study as well as adopt a case study of Queen's University Food Services. The case study of Queen's University food services operations is my primary empirical contribution to this thesis. This case study involved a variety of qualitative approaches: participant observation, journal writing, archival work and in-depth semi-structured interviews with key players in the food services industry at Queen's University and in Ontario. To provide context to the primary case study of Queen's University Food Services, I compared it with the University of Toronto and the University of Guelph. These two institutions were chosen because of their perceived reputations in innovative food service sustainability. I also chose these particular universities because of some basic similarities in their food service geographies, explained further in Chapter Three, "Methods".

1.4 Thesis Organisation

The examination of university food services is developed in the following four chapters. I begin my thesis with my review of relevant literature, and within which I identify the current gaps and debates that inform this research. Chapter Three outlines the methods used to collect primary and secondary data. Participant observation, a literature review and theme-based content analysis, archival research and primary, semi-structured interview were used to collect data. Chapter Four presents the case study of Queen's University food services and

the results of my research. Chapter Five discusses the implications of my findings for the literature and for policy. In particular, I argue that more research needs to be done on food service delivery and on the role that university procurement can play in a more sustainable future. The final chapter summarises the main arguments and links together the ideas developed through this thesis. It emphasizes the need for more study into the role of public procurement and the implications of the moral food economy.

Chapter 2 - Literature Review

2.1 Introduction

The purpose of this chapter is to review the current debates within the agro-food geography literature that are exploring public procurement as a possibility for moving toward a more sustainable form of food economy³. This thesis looks to explore general institutional sustainability, by using university food services as a case study model. Currently, limited published literature exists on university food services and institutional food purchasing, providing a significant precedent for research in this area.

Much of the recent geographical research on food has explored the potential of ‘alternative economic spaces’ (Leyshon, Lee and Williams, 2003). The burgeoning literature on alternative food systems examines those particular food provisioning processes that *appear* to be operating in an oppositional manner to traditional agro-food activity. I am particularly interested in the way Kevin Morgan (2006; 2007) has applied Andrew Sayer’s (2000; 2004)’moral economy thesis to the study of alternative food systems. Andrew Sayer (2000; 2004) argues that too much contemporary economic geography has failed to examine the

³ Which is often referred to as alternative food geography.

moral dimension of economic development. According to Sayer (2007, <http://www.lancs.ac.uk/fass/sociology/profiles/16/16/>):

The search for standpoints from which critiques of contemporary social and economic arrangements can be made has thus led me to take an interest in morality and ethics in everyday life. A major focus has been on the relationship between ‘moral economy’ and political economy. ‘Moral economy’ is concerned with the moral or ethical influences on, and legitimations of contemporary economic processes and forms of organisation, and how economic pressures influence moral sentiments and norms. The objects of this assessment can range from families, organisations (including capitalist firms), up through the welfare state to the international division of labour and attempts to regulate it.

For Kevin Morgan (2006; 2007) Sayer’s concept of the moral economy is critical to the study of food systems because it suggests the possibility of an alternative which, in the case of this research, could be defined through a greater sustainable orientation in university food provision.

The literature review is organized as follows. The first section introduces and develops Kevin Morgan’s concept of the moral economy of food. His work is part of a much larger project on alternative economic spaces, which time and space does not allow me to review. However, his work is also part of a small, but growing body of literature on ‘alternative food geographies’⁴ (Maye et al., 2007). The proposed debates currently underway in the field of “alternative food geographies” are then discussed. The debates that will be examined include: (1) questioning whether ‘alternative food’ is just an euphemism for ‘elite food’, (2) asking what are the measurable benefits of ‘re-localising’, (3) problematizing the scope of assessment in food geographies, and (4) exploring the role of ambiguity in the language of alternative food.

⁴ The background and general evolution of this body of literature is explored in Appendix Two so that in this section I can focus primarily on the current debates in the alternative food systems literature.

Finally, I examine some of the gaps in the alternative food systems geography literature. These include: little information on (1) the role of public procurement in moving toward more sustainable food geographies, (2) the role of the food services in the sustainability of the university, (3) transnational food management companies, and (4) the student consumer. In order to address these gaps, insights from health sciences literature will be considered, especially this literature's examination of student consumers' ability to make choices regarding their health and nutrition.

2.2 The Food Systems Literature from a Geographical Perspective

2.2a The Moral Economy and Food Sustainability

According to Morgan (2007: 2), “the concept of moral economy has re-emerged in recent years partly in response to the excessive utilitarianism of mainstream economics”. There are fundamental philosophical and practical issues around social and environmental justice that need to be reinserted into our understanding of how this economy operates and, through critical examination, addressed. The economic cannot be understood in abstraction from the social and the cultural – as all economic activity has an ethical dimension (Sayer, 2004). Political economy approaches are limited in the manner in which they can engage in a multidimensional analysis of food services, particularly in regards to evaluating institutional sustainability agendas.

Morris and Evans (2004: 95) argue that the ‘cultural’ turn in geography, and more generally in the social sciences, has been a move away from the “theoretical hegemony” posed by political economy approaches. Buttel (2001: 172) suggests that the contributions of

cultural-turn theorists have added “new tools of analysis” to the study of power relations, but have not significantly differentiated their analyses from that of more political economy-directed approaches.

The differentiation and fragmentation of theory is demonstrative of the post-structuralism movement in geographical theory. In the context of food studies, post-structuralism provides a perspective that illuminates the nuances and contradictions in the food system between competing local and global interests, and the conflicts among participants in the food system. These relationships are complex and interwoven. Unlike structuralism which focuses on the process of determining meaning through gaining an understanding of underlying structures or systems, post-structuralism focuses on relations and interactions. As Murdoch (2006: 9) states, “meanings and actions cannot be seen as simply manifestations of underlying structures – they proliferate in complex and unexpected ways, depending on the relations established between subjects and objects within the system”. He traces the development of post-structuralism and its introduction into critical human geography to the cultural turn in the discipline and how it became a tool for ‘reading geographical cultures’.

Post-structural political ecology is a theoretical intersection point that synthesises the concerns of political economy, ecology and responds to the criticisms of post-structuralism that call for a better understanding of the contextual and spatial nature of the production of knowledge and experience (Greenberg and Park, 1994; Robbins, 2004; Neumann, 2005). LeHeron (2006) makes a strong case, based on the work of Redclift (1997) for a post structural political economy/ecology approach in research that focuses on sustainability. He also cites the conclusion of Hanson and Lake (2000: 2) that “sustainability is fundamentally a political rather than a technological or design problem, in the sense that the greatest barrier

to sustainability lies in the absence of institutional designs for defining and implementing sustainable practices in local contexts.”

By reasonable extension, food and food quality are political, rather than technical issues solely based on nutrition. They are political strategies that aim to improve the profile and perception of food services and they are contextually and spatially specific. Particular attention needs to be paid to the micro-economics and micro-politics of institutional governance, as well as to the mechanisms that determine and drive policy development and reform. leHeron (2006: 442) argues, “sustainability literature contains little to suggest either wide comprehension of ecological and economic processes in their institutional settings or appreciation of the political nature and effects of knowledge about such relationships and interactions” .

Food is a critical part of this moral economy because it is critical to life and, as such, we have a moral responsibility to address the profound challenges in the food system⁵. The incorporation of a morally directed political philosophy into the literature provides researchers with a platform from which to argue for a different kind of world and a different model for economic practice. Rimmington et al. (2006) claim that the only way to transform institutional and corporate practice is through the adoption of sustainability agendas. Sustainable development is critical to the moral economy of food, and also as a transformative tool for policy development. Most discussions of sustainability inevitably fall on the use of the oft-cited Bruntland Commissions’ definition of sustainable development as, “[d]evelopment that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). The moral parameters of this definition are quite apparent. Living within our means is not offered up as something we

⁵ For a review of the challenges in the food system, see Appendix One.

should think about doing; it is something we must do, imparting a moral imperative to sustainability. For Morgan (2007) a moral sustainable food economy is the inclusion of the social, economic and environmental dimensions of development. His definition complements much of the work that is being carried out in the alternative food geography literature.

2.2b Alternative Food Systems

Alternative food systems are defined in many ways, but essentially 'alternative' is an adjective used to describe an array of food networks that are either fair-trade, organic, or local and that tend to appeal to a 'quality' seeking consumer of food. Whatmore et al. (2003) suggest the resilience of traditional food networks and the survival of embedded localized food production in the face of rapidly expanding and pervasive forms of industrial agriculture are part of a broader shift towards 'quality' oriented production and consumption. These notions of 'quality' are socially constructed (Hinrichs, 2000; Renting et al., 2003; Whatmore et al., 2003; Goodman, 2002; Murdoch et al., 2000), but are often employed as being oppositional to the industrial, anonymous nature of intensive agriculture. 'Alternative' is associated with shorter supply chains and alternative systems of provisions, such as farm-gate sales, community supported agricultural initiatives, artisanal food production and a closer relationship between consumer and producer (Allen et al. 2003; Donald and Blay-Palmer 2006; Goodman and DuPuis, 2002). By extension, quality and alternative have become intertwined with 'local', as Murdoch et al. argue (2000: 108) "quality food production systems are being reembedded in local ecologies". Some have even gone as far as to suggest that these new food systems are establishing a new 'trust' between producer and consumer (Whatmore et al., 2003) This echoes approaches in economic geography that document the

role of trust and the value of face-to-face interaction in facilitating innovative forms of economic activity (Gertler, Wolfe and Garkut, 2000; Granovetter, 1985).

In many cases the danger with alternative food systems research lies in the inclination to present these models as 'better' based solely on their potential ability to reconfigure conventional capitalist market mechanisms and as well, the tendency to oversimplify identification of the consumer.

2.2c Key Criticisms of Current Agro-food Research

2.2c i Diet for the Privileged Classes?

Morgan and Murdoch identify the consumer as “well educated, middle-class professionals” (2000:170). If this is the case, then arguably, alternative food systems are simply providing organic and alternative produce for an elitist class diet, or what Goodman (2004) refers to as a diet for the privileged classes (Morgan and Murdoch, 2000; Goodman, 2004; Crewe, 2001). This contradicts the widely held ideological backbone of organic farming and the philosophical underpinnings of many aspects of the alternative foods sector that contend that all people should have access to good food (Guthman, 1999 and 2004; Kloppenber et al., 2000, Allen et al., 2003; Hendrickons and Heffernan, 2002; Lang and Heasman, 2004; Reynolds, 2000). Demand for 'alternative' food products like organic, and locally produced foods is argued to be consumer driven (Lockie, 2002). Morgan and Murdoch (2000:170) state that “in contrast to the industrial food chain the consumer tends to assume a more active role in decentralized organic chains”.

2.2c ii Measuring the Value of Oppositional Eating

Alternative food systems are offered up as the antithesis to the conventional food system and as the mechanism for re-embedding food within local economies. Beyond this goal of ‘re-embedding’ it is unclear whether these systems are able to meet or improve conditions of food security. Clarke (2005) makes this point when he asks how this process of embedding or localizing has actually been successful in attaining the goal of food access. Discussion and debate in agro-food studies has focused on the networks and production models that enable alternative food networks, but the question remains, enable them to do what? Rimmington et al. (2006), question whether bringing small producers into the market and disrupting the economies of scale of the food system will result in reducing available` amounts of lower cost foods.

Furthermore, how will this success be measured? If these systems are in fact better or more sustainable, it should follow that they are better and more sustainable for the entire population, particularly if they are being offered up as the antithesis to the conventional agricultural system.

2.2c iii The Economics of Re-localisation

For the purposes of this research, another important omission is knowledge of how the food service sector contributes (or could contribute) to regional economies. Institutional catering style food provision services are relevant here. Institutions are territorially embedded in very complex economic relationships in their host communities⁶. Many argue that there may be sustained economic potential from re-localizing public procurement in a university setting

⁶ In the city of Kingston, for example, there are approximately 4,500 people employed in the university and it is estimated that Queen’s University activities and students generate over \$567 million for the city each year (Healey and Akerblom, 2003). Along the same lines, with over one million meals served each year in its cafeteria, the role that food services could play in the local economy is tremendous.

(Rimmington et al., 2006; Morgan, 2006, Morgan, 2007, Friedmann, 2007). Agro-food research has been limited in the ways in which it has incorporated the city-region into analyses (Donald and Blay-Palmer, 2006).

2.2c iiv Ambiguous Language

Donald and Blay-Palmer (2006) also draw attention to the false binary that is being replicated throughout the literature that pits ‘alternative’ against ‘conventional’. Hinrichs (2000, 2003) notes that although the hallmarks of alternative food systems such as the farmer’s market foster a closer relationship between farmers and consumers, these market exchanges are still firmly rooted in traditional commodity relations, and therefore actually represent a more conventional means of obtaining food. She also argues that presenting local as inherently better or more desirable is an over simplification of the dynamics of the food system.

To Hinrichs (2000), the foundation for the development of alternative food systems lies not in non-traditional market relations but rather finds their roots in the sustainable agriculture literature and movement. Food security literature in the 1980s introduced the notion of sustainable livelihoods as part of long term planning for food security. Sustainable has often come to mean organic, and organic has been understood to be alternative.

Guthman (2004) argues that it is a problem to accept these terms at face value. She discusses the example of organic farming in California to demonstrate this point. As organic agriculture becomes standardized and codified, the parameters that differentiate organic from non-organic largely have been determined by large agro-business enterprises that have an economic interest in taking organic to its lowest possible operational threshold. Rather than being a lifestyle or ideological enterprise, these industrial operations simply change their farming inputs to meet organic standards but maintain their mono-cropping intensive

farming practices. Without an explicit and shared understanding of what organic and in the same vein ‘alternative’ means, the meaning of ‘organic’ has been expropriated and altered by these larger companies (Allen et al., 2003; Guthman, 2004).

There are similar problems with terms such as ‘local’. For instance, Hinrichs (2003) makes the important point that ‘local’ is socially constructed. Local food identities are an important component of alternative food systems, however changeable notions of ‘local’, challenge the creation of distinctive food identities for places (Hinrichs, 2003). She notes that local can become valorized and viewed as unproblematic in the eyes of many local activists and consumers. Winter (2003b) suggests that buying local may in fact be a form of a defensive politics of localism, rather than a turn to ‘quality’ foods as suggested. Watts (2005) also argues that this niche marketing of local product may increase local market vulnerability by committing an area to one distinct food product. In fact, alternative is saddled with a number of assumptions that have not been properly met in the literature. The assertion that alternative is somehow ‘better’ is perhaps the most obvious. The case study work presented here looks to resolve whether or not this “messiness” exists in terms of local versus non-local food sources with regard to moving toward sustainability.

2.2d Gaps in Current Agro-food Research

2.2d i Public Procurement

Agro-food studies continue to produce exciting and interesting work. However, significant gaps still exist in the literature. First and foremost, there is a significant lack of research on the potential of public procurement and the role it could play in creating alternative food geographies. The leading scholar in this area is Kevin Morgan, who has written on school

meals in the U.K. (See Morgan, 2006, 2007). Morgan calls public purchasing a ‘sleeping giant’ in the state’s move towards sustainable development.

2.2d ii The University and Sustainability

There is a growing body of literature on the university and sustainable development. However, this literature has focused primarily on the incorporation of sustainable development in to broader policy development in the university (See: Cortese, 2003; Filho, 1999; Lorzano, 2003; Lorzano 2006; Uhl and Anderson, 2001; Morgan and Morley, 2002; Morgan, 2006; Morgan, 2007; M'Gonigle and Starke 2006; Shriberg, 2002). Much of this work has failed to engage effectively with the potential of public purchasing and also, the role of food services in the overall sustainability of the university.

2.2d iii Transnational Food Management Companies

There is little research into the strategies of transnational agro-food capital, especially the huge and growing area of food management service strategies⁷. Following Pritchard (2000), there has been a failure in the agro-food geography literature to adequately address or to investigate the structures and strategies of transnational agro-food capital, especially food service management companies. Research thus far has only served to place them within socio-spatial landscapes. Pritchard (2000) additionally suggests that these internal mechanisms include the arrangements that allow them to expand their competitive advantage. Traditional economic geography approaches have limited the scope to which food management companies can be conceptualised. Dixon (1999) suggests that the role of

⁷ See Appendix Three for a further examination of the role and evolution of food management companies in the agro-food economy.

ready-made food and catering style services needs to be included in and investigated if commodity systems analysis can have continued applicability.

2.2d iv The Consumer

Similarly, Clarke (2005) criticises the failure of agro-food studies to explore the ways in which alternative food networks are developed and successfully sustained, and whether or not these new food systems' territorially embedded nature will assure the production of 'better' foods. More importantly, the movement to conceptualize *the consumer* more fully in agro-food studies suggests that the process of consumption, rather than production is increasingly defining identity. It is important to understand the degree to which consumers - who in the case of the University are students - are able to shape and define their food system.

The consumer is critical to discussions and analysis of food systems. This is particularly because alternative food systems represent a reconfiguration of consumer-producer and particularly consumer-farmer relations often bringing 'trust' into the analysis of economic relationships (Goodman, 2003), what Whatmore et al. (2003) deem "a reconvened trust between food producers and consumers". The consumer is therefore an active agent and cannot be fully explained by traditional economic theory.

2.3 Other Food System Literature

Building on the gaps identified above, I believe another body of research is critical in framing a moral economy argument. There is a growing number of studies that argue that students are not capable of making good food decisions. This literature does not cast personal judgement on students, but suggests that our internal impulses will more often override our

better judgement, particularly in our food choices (Bronwell and Horgen, 2004). This argument is critical to the notion of a moral economy of food and presents a case for regulatory interventions around issues of health and nutrition into food services.

2.3a The Student Consumer and the Normalisation of the Unhealthy Lifestyle

It is important to remember the food legacy that has followed current post-secondary students to their university and college environments. This generation has grown up in an advertising-intensive age in which (1) food ads have been aggressively targeted towards them as children, and (2) that multi-million dollar agreements have been made between their schools and the junk-food industry to strategically place vending machines into schools. Thus, these students often see this food environment as ‘normal’ and, as Acs and Stanton (2005:140) argue, these efforts have been quite successful in creating “lifelong habits of shifting to unhealthy food choices.” These authors point to the increasing number of places where un-needed snack and junk foods are available, from checkout counters to gas stations. Acs and Stanton (2005) argue that this infrastructure is not only pervasive, but also inert. The total market capitalization of eight drug manufacturing, food processing and marketing companies in 2003 exceeded (US) \$530 billion (Acs and Stanton, 2005). With massive profits and potential for growth, there are no financial incentives for these companies to encourage consumers to reduce their food and food product consumption.

Moreover, the efforts of these companies have been extremely successful. The sheer size of this industry points to Acs and Stanton’s (2005) and Bronwell and Horgen’s (2004) argument that food choice is not so much a function of personal choosing but rather a result of the construction of an infrastructure by government and business that accommodates

unhealthy lifestyles. Our appetite for excess consumption has been carefully crafted in two ways. First, it has been crafted through advertising and persuasive campaigns to encourage unhealthy eating habits. Second, these eating habits have been developed through the use of flavour enhancers and chemical additives. We consume foods that are more calorically dense, higher in fat and salt, but less filling. Hendrickson and Heffernan (2002) argue that our ‘tastes’ have been constructed by the food industry. Nestle’s book, *Food Politics* (2002) engages with the level of responsibility that the food industry has for our consumption habits. Fierce competitions over every dollar spent by consumers on food drives the industry to endlessly find ways of encouraging and increasing our consumption. Most people operate wholly unaware of the practices and efforts of food companies and, as Nestle suggests, “most of us believe that we choose foods for reasons of personal taste, convenience and cost; we deny that we can be manipulated by advertising and other marketing practices” (2002:2). If we can be manipulated into eating too much of the wrong foods, then perhaps we could be equally influenced to eat more reasonable amounts of healthier foods.

The effect of this pressure has a profound impact on student eating habits. Levitsky et al.’s (2004) study of Cornell University students who were given ‘all you can eat’ access to a weekly buffet found students consumed far more when larger amounts of food were available. While standards and guidelines exist in Canada and the United States for portion sizes, studies seem to indicate that, despite knowledge and education about food intake, consumers are more likely to be influenced by immediate environmental factors (Edwards et al., 2005; Levitsky, 2004, Young, 2002; Nestle, 2002). Edwards et al. (2005) argue that where food services are the sole providers of an individual’s diet they should “do everything

possible” to ensure that those people can consume an appropriate diet and further suggest that portion size control is part of this intervention and moral, if not legal, obligation.

Buttriss et al.’s (2004:335) British Nutrition Foundation study of the factors that influence food choice states that eating behaviour can be very difficult to change because so many “often interrelated factors influence food habits”. Their project included a significant review of published intervention studies. As a result of their findings, they argue that a “one-size fits all” method is not particularly effective and that “tailored approaches have been more successful and different approaches seem to suit different population groups and different aspects of diet” (2004:335). While individualizing the approach is critical, Buttriss et al. (2004) also note that consistency and reinforcement of the message is vitally important to the success of any intervention campaign.

Buttriss et al. (2004) discuss a number of interventions into cafeteria-style eating facilities that have improved dietary behaviour. They argue that increasing the availability of healthier food choices and making covert changes to dishes (like reducing the fat or sodium) have both been successful. The impact that better labelling and promotional materials have on changing eating habits is less clear. They cite two examples in the U.K. where healthier eating campaigns have had little impact on behaviour, two which had a small impact and two which resulted in increased sales of healthier labelled dishes. The most successful method of intervention is making healthier food options economically attractive. However, for students whose meal plan cost is often paid up front, this would have little impact on their food habits. Buttriss et al. (2004) reemphasize the point that attempts at changing attitudes and knowledge only have a limited impact on actual changes in behaviour.

2.4 Conclusion

In this chapter I have reviewed the literature relevant to my research. I have also identified purchasing as a key dimension of sustainability, and through this, and other measures, the university as a possible space for resisting conventional food geographies. Public procurement has entered an era of ecological and moral responsibility where it is becoming harder to ignore the need for universities to become sustainable. Universities have traditionally been inward-looking institutions; however, even the most fervent critics of sustainability can no longer deny that the impact of these places is global, as the products and inputs which sustain them are sourced from around the world. This potential, capability and responsibility make the university an important site of study.

In order to address the research questions introduced in the first chapter, (1) Who are the universities which are actively embracing a more ecological and “sustainable” approach to campus food services and why? (2) What are the factors that enable or disable the implementation of sustainable ‘best practices’? and, (3) Who are the key actors that are determining the direction of food services, four hypotheses are presented below:

- (1) The practice of food services has been normalized in such a way as to render invisible the ecological impact of their operation.
- (2) Many institutions are challenging conventional food practices with alternative sourcing, selection and waste management practices.
- (3) Food and food quality are political, rather than solely technical issues concerned with areas of nutrition. Political strategies that aim to improve food services are contextually and spatially specific.

(4) Students are increasingly informing institutional practice, which may be problematical given new research on choice and corporate environments.

These four hypotheses link key issues from the literature with the specific issues facing universities. Drawing on the relevant literature, my research and methodologies explore and develop these hypotheses.

Chapter 3 - Methods

3.1 Introduction

As I argue in the previous chapter, food services are an integral part of the overall function of a university. They are important not only for student satisfaction but they are also one of the largest producers of waste and users of energy on a campus; thus, the management of these services is essential to the sustainable operation of a university. Despite the important role of food services, there is little research that explores the management and responsiveness of these services. Moreover, with the exception of university-wide sustainability assessments, little is known about the factors that either hinder or facilitate the implementation of ecological or ethical food service-policies and practices. As reviewed in Chapter Two, I adopted Morgan's moral food economy framework as my theoretical lens through which to examine university food service provision at Queen's University. In terms of research design, the case study method was the most appropriate method.

3.2 The case study method

This thesis uses a case study research design. The academic literature on food and food policies has tended to focus on regional food networks and rural economies, with very little consideration given to the mechanisms that enable or encourage institutional policies. With the exception of Morgan (2006; 2007) and Friedmann (2007), the literature has virtually ignored the potential power of institutional purchasing and what Morgan (2007) calls, “the power of the public plate”. I have employed a case study approach in an effort to better understand some of the unique geographical factors that may affect how that power is exercised.

Case studies are well suited to the examination of institutional practice, as Kitay and Callus (1998) argue, case studies aid researchers in understanding ‘complex social phenomenon.’ I chose a case study method, as I believe, like Bradshaw and Stratford (2000) that cases serve as an example of more general processes and structures. The case study of Queen’s University, contextualised by comparisons with the University of Toronto and the University of Guelph, allows for broader more generalised theorization on policy development, governance and consumption practices. Case studies are important for situating phenomena in their wider contexts (Yin, 1994). Hakim (2000) states that case studies provide a window through which the actual operation of political administration can be viewed. She also suggests that they can help to substantiate and illuminate perceived underlying causal processes. Yeung (2003:444) argues that ‘new economic geographers’ have begun “to examine the complex ways through which economic institutions are spatially entangled in webs of socialized and institutionalized relationships. As such, these economic institutions are not conceptualized merely as economic machines responding to external

market and cost conditions”. I used a case study method to examine Queen’s University, which employed a number of methodologies that allowed me to examine relationships at a more detailed level.

Queen’s University is my primary site of investigation. I chose it because of my association with, and knowledge of, the school and personal experience with its food services. The case study approach I applied to Queen’s University was used to provide what Hakim (2000:60) describes as a “more richly detailed and precise account of the processes at work.” My personal integration with the food services administration and staff at Queen’s University was an important element of my case study and allowed for a greater degree of access than might otherwise have been enjoyed. Queen’s University is also an interesting choice for a number of reasons. First, it is considered ‘the flagship’ of Sodexo’s Canadian institutional operations because of its high concentration of highly experienced and decorated chefs and staff. This means that Queen’s University cafeterias use almost no pre-made/package products. For instance, almost all soups, sauces, bases, and gravies are made from scratch on site. Secondly, despite this, Queen’s University has a poor record in student satisfaction and regularly ranks poorly in national comparisons between competing Universities in the MacLean’s University Rankings and the Globe and Mail’s University Report Card⁸. Finally, Queen’s University use of contracted food services is unusual in Ontario as compared to all other similar-sized institutions⁹ (University of Windsor, University of Waterloo, McMaster University and the University of Western Ontario) that all operate their own food services.

⁸ Queen’s is in the bottom 4 of ‘Medium-Large’ Universities in Canada – which includes all schools with 12,000-22,000 students.

⁹ University of Toronto has all three major food contractors operating on campus as well as self-operated and retail outlets.

I have also investigated the food services at two other Ontario universities: the University of Guelph and the University of Toronto. The three schools have a number of similar attributes that make them suitable for comparison. All three have guaranteed residence for first year students with a mandatory meal plan. They are all in Ontario and share similar socio-economic but also agricultural and climatic circumstances. Therefore, by extension, they are bound by the same seasonal and geographical limitations in regards to food access and transportation. They are also bound by the same provincial and federal health and safety, and food safety regulations. They are also - more or less - drawing from the same labour-shed pool of food service executives and staff for recruitment purposes.

3.2 Research Questions and Methods

In this section I reintroduce my research questions and link them to the methods used in this research: (1) participant observation and action research, (2) a literature review and theme-based content analysis approach, (3) archival research and (4) primary interviews with university administrators and directors, food services staff and corporate food management directors.

(1) Who are the universities which are actively embracing a more ecological and “sustainable” approach to campus food services and why?

In order to answer this question, I draw upon primary materials such as policy documents and University websites. I have also examined secondary material such as M’Gonigle’s (2006) *Planet U* and Creighton’s (1998) *Greening the Ivory Tower*. I decided on a case study method to compare three Ontario universities and my choice of schools was based on the aforementioned review of a wide variety of grey literature sources. My

awareness of the different efforts of schools, institutions and businesses was also complemented by my own involvement in a number of aspects of the food movement including, but not limited to, participation in a number of listservs, associations and mailing lists. I also attended numerous conferences and workshops that highlighted the work of different institutions that were working toward attaining sustainability.

I employed Queen's University as a case study first to serve as a central point for comparison of other universities and also to help generate generalised theorizations.

(2) What are the factors that enable or disable the implementation of sustainable 'best practices?'

My case study research provided the foundation for assessing policy effectiveness. The use of the three universities allowed for a comparison of successful versus less successful attempts by the different institutions to incorporate more sustainable practices into their Food Services. The archival work I did at Queen's University archives provided evidence of the changes in policy and practice that altered the direction of Food Services.

The results from my interviews helped me to assess my participants' opinions on a) what makes 'best practise', b) how different institutions gauged their own successes and failures and c) the input that non-administrative actors have on the direction of food services.

I also relied on a review of a wide body of grey literature about other institutions and their activities. This included frequent keyword newspaper and publication searches to stay up to date on initiatives, subscriptions to various food and university oriented listservs, and participation in a number of groups and organisations who engage in food-related activities.

(3) Who are the key actors that are determining the direction of food services?

In order to assess the different avenues of influence on food services, my participant observation and participation in a number of university committees provided valuable insight and evidence into the inner workings of the Food Services administration at Queen's University. I was witness to, or actively involved in, a number of decisions concerning pricing, introduction of new products and the design of meal plans – all of which helped to reveal many forms of formal and informal decision-making. As mentioned above, my interviews were also instrumental in providing insight into the bureaucratic functions of the different institutions. Interviewees were asked about the role and influence of students and student groups on encouraging sustainability initiatives and efforts to increase the availability of 'healthy' foods on campus.

In order to understand how discursive practices in the food service decision-making realm are shaped, I engaged in a discourse analysis, which I explain in more detail below. I critically read policy texts and engaged in participant observation, including keeping a research diary. I also undertook a content analysis of media publications and online publications and materials. I subscribed to online newsletters like 'Food Director Connection' and other industry-oriented materials.

3.5 Methodologies

3.5a Critical Geographies and Action Research

My personal involvement in the food movement makes it impossible for me to objectively separate myself from the work that I am doing. This involvement has given me the opportunity to engage a key element of critical geography – praxis. I employ Wakefield's (2007: 331) definition of praxis as "the melding of theory/reflection and practice/action as part of a conscious struggle to transform the world." Some of my initial concerns in starting

my research was that my own commitment to sustainable food would act to undermine my relationship with the administrators who I hoped to interview at Queen's University. For instance, I became a voting member of the Food Committee¹⁰ when we were deciding on whether to provide Starbucks' coffee on campus and I was one of the outspoken critics on the issue. The opposite in fact occurred as my involvement allowed me to build relationships with many of the key actors in food services and, while we did not always agree on key issues, these administrators have been invaluable in providing data and generating other contacts for me.

I employ the use of praxis, rather than activism, as I am weary of the loaded nature of the term. I would not consider myself an 'activist'. Wakefield (2007) touches on the complexities of defining activism. These definitions are often exclusive in nature and reveal the tensions between perceived 'real' versus 'shallow' activism.

I also strove to be aware of Fuller and Kitchen's (2004) criticisms of the failure of geographers to engage in critical praxis. Instead, they suggest engagement seems to be limited to "pedagogy and academic writing" (p. 6). They argue that it "rarely consists of a marriage between academic and activist roles, in which one's private and professional attempts to change the world are not divided into distinct and separable roles and tasks" (Ibid). There have been a number of recent criticisms of the failure of the geography community to contribute significantly to public debates (see: Martin 2001; Massey 2001; Dorling and Shaw 2002) and most significantly Castree's (1999) argument that researchers have also failed to focus their actions 'in here' – that is, inside the academy to begin to address major administrative and structural issues. Wakefield (2007) suggests that working to 'rework' the university, as an institution, is an important form of praxis.

¹⁰ Bruce Griffiths, Director of Residence & Food Services, heads this Committee. It advises on issues such as meal plan changes and the introduction of new services or products into food services.

3.5b Situated Knowledge and Discourse Analysis

I am embedded in food politics at Queen's University and I eat the food. The great irony of this research was finding me in the office on a Saturday afternoon eating a slice of pizza. It was in those moments, however, that I was forced to reflect on my own objectivity and acknowledge that while *I* believe pizza is a poor meal replacement many do not. As I describe in my later chapters, the processes of the conventional food system have been rendered largely invisible (Friedmann, 2000) and the consumption of subsidized ecologically unsustainable food is par for the course for the vast majority of North American families. This food system has democratized access to food and the everyday consumption on the part of eaters is largely uncritical and unexamined. There is a bias in language and power that works to constantly re-entrench this system, ensuring its continuation despite extensive evidence that it is unsustainable and that it reinforces unhealthy eating habits (see Morgan, 2006; Acs and Stanton, 2005). My own position is deeply critical of this food system and my efforts in this thesis are focused in part on challenging what Bondi (1997:248) calls "the mastery of dominant knowledge systems".

I found that even though my archival research revealed that, as recently as 30 years ago dining services were still greatly influenced by seasonal availability, the current food services 'regime' was presented in a highly normalized and non-critical manner. In the same vein, the continuation of the food system in much the same capacity and organisation ad infinitum, was reinforced through language and practice, and I often was left with the impression that sustainable and local food initiatives were put in place to satisfy consumer demand rather than true concerns for ecological responsibility.

I believe that the food system and the practices of food services are constructed through language and power. Rydin (1998:178) argues, “language actively constructs actors and the relations between actors”. The employment of words like ‘choice’ and ‘healthy’ as descriptors fuelled a certain understanding and interpretation of what is 'quality' food. My analysis of discourse of practices were informed by an ongoing participant observation of the different elements of the Food Services at Queen’s University and journal writing as a means of recording information and ideas.

3.5b i Participant Observation

As stated, I was engaged in observation throughout my research at Queen’s University. My observations, which were recorded in my journal, on interactions, language and use of power serve as primary sources of data and as a means of interpretation regarding the politics of food services. My involvement in many aspects of both food services and the food activist community in Kingston was part of a conscious effort to embed myself in the research. Kearns (2005:104) states that “observation is the outcome of active choice, rather than mere exposure.” Kearns goes further to cite Crang (1997:360) who argues that observation is a way of “taking part in the world, not just representing it”. My immersion in food services was important for providing complementary evidence for my research but, more importantly, it contributed to what Kearns (2005) describes as ‘contextual understandings’ through direct experience and participation. Wakefield (2007) identifies the two broad categories of praxis as: incorporating one’s own values into everyday activities and involvement in groups and organisations.

Participant observation was an appropriate method for my case study as my involvement in many different areas of the food movement created informal opportunities

for me to interact with people with similar interests without going through more rigid avenues like interviewing. Kearns (2005:195) argues that interviewing can create more formal circumstances that limit the 'flow' of everyday life.

At Queen's University, as I already mentioned, I sit on the Food Services Committee, the body responsible for advising Bruce Griffiths (Director of Residences and Food Services) on decisions regarding meal plans and retail food services. I am also part of the newly-formed Sustainability in Food Services Committee which is acting to address and assess the 'sustainability' of the food at Queen's University. Moreover, I am a member of a local food research group and volunteer with a National Farmer's Union sponsored project called 'Food Down The Road' which is working to develop a more integrated local food economy. In the winter of 2007, I participated in a Future's Search Conference as representative for youth in the city. As a result of this conference, I am now part of an environmental action group consisting of municipal government officials, private business and corporate interests and other community members. One of our major objectives is to increase the amount of local food purchased by Kingston's many public institutions, including Queen's University.

In the winter of 2007, I also helped with some of the organisation of the Critical Spaces of Food conference held at Queen's University. Since September 2005, I have attended a number of conferences on food issues, as outlined in Table 3.1.

Table 3.1 – Conferences Attended during Master’s research

Conference	Location	Date
Farm Folk, City Folk Conference: How Alliances Can Bring Local Food to the Table	North York, Ontario	November 2005
What are We Eating?	Montreal, Quebec	February, 2006
Guelph Organic Conference	Guelph, Ontario	January, 2006
Critical Spaces of Food	Kingston, Ontario	February, 2007
Ontario Association for Impact Assessment	Ottawa, Ontario	October, 2006

As another element of my praxis, my values are incorporated into my everyday activities. Before my master’s research, I apprenticed on an organic mixed livestock farm, learning how to do everything from making mayonnaise to dill pickles from scratch to driving a horse-driven plough. In the food movement, this is often referred to as “putting in your time”. This internship helped with my credibility in the food movement, but also provided invaluable insight into the production end of the food system and broadened my perspective on the adaptability of farmers to meet changing consumption demands.

The skills I learned in my apprenticeship also helped me to integrate into the local food movement in Kingston and through the summer of 2006 I was able to trade my skills and labour on local organic farms in exchange for produce. This, again, created informal opportunities for me to meet different actors in the food movement.

3.5b ii Journal Writing

My journal writing efforts began as ancillary to the research process as a method of organizing my research materials, but it grew into a very important part of my method(ology). I made it a habit to always have my notebook with me to record ideas, experiences and interpretations. I not only brought it to all of my meetings with my

supervisor, but to every committee meeting, conference and event I attended. These notebooks became a hybrid of a research diary and fieldnotes. I recorded information that would be better categorised as qualitative, such as conversations and presentation material and would constitute fieldnotes (Hay, 2000, p.195). However, I also made other kinds of observations and the notebooks were an important site for me to be critically reflexive and record thoughts and ideas about the research process. I found this technique to be tremendously useful and the contents of my notebooks to be invaluable.

3.5c Literature Review

This process began with a review of relevant academic material on the subject. While food and rural studies have been explored extensively in Geography, as I point out earlier, the role of institutions in the food system has been largely ignored. My work is part of a wave of very recent research into public purchasing and the power of institution food contracts, particularly by Kevin Morgan (2005; 2006) and Harriet Friedman (2007). Friedman (2007) in particular has explored the University of Toronto's introduction of the Local Flavour's Plus contract and the underlying influences and motivations.

I employed a broad theme-based content analysis, which allowed me to target key themes from a range of academic literature. I began by exploring the food studies literature which spans a number of disciplines, including geography, economics, sociology and health sciences. This material explained the conventional food system and the dietary practices of students. While there is limited literature covering the role of food services in the food economy, much has been written about the role of the university as a site of sustainability. M'Gonigle and Starke's *Planetary U*, and Creighton's *Greening the Ivory Tower*, along with a

number of articles¹¹ on the theme, highlight the responsibility that universities have in moving towards more sustainable practice.

I also reviewed a number of policy documents and a variety of grey literature including material from the Toronto Food Policy Council, the Canadian Government, and materials from other schools and programs that have worked to improve their food services and build better linkages between their kitchens and producers. With the help of a librarian at Queen’s University, I also explored some of the industry material, including Food Management, Food Service Director and newsletters from the three major food management companies (Sodexo, Aramark and Chartwells¹²). These materials tracked industry trends and deepened the profile of the Big Three food management companies.

As well as newsletters and reports, I also signed up to a number of different food and university affiliated listservs, see Table 3.2 below:

Table 3.2 – Listserv subscriptions during Master’s Research

1.	Foodplanning network	This list is designed to connect urban planning academics and practitioners who are interested in examining connections between urban planning and policy and the food system. foodplanning-bounces@mailman1.u.washington.edu
2.	Food Alliance	Food Alliance is a non-profit organization that promotes sustainable agriculture by recognizing and rewarding farmers who produce food in environmentally friendly and socially responsible ways, and educating consumers and others in the food system about the benefits of sustainable agriculture. info@foodalliance.org
3.	Organic Consumers Association	The Organic Consumers Association (OCA) is an online and grassroots non-profit 501(c) 3 public interest organization campaigning for health, justice, and sustainability. The OCA deals with crucial issues of food safety, industrial agriculture, genetic engineering, children's health, corporate accountability, Fair Trade, environmental sustainability and other key topics. http://www.organicconsumers.org/organicbytes.htm
4.	Food First	Institute for Food and Development policy - carry out research, analysis, advocacy and education for informed citizen engagement with the institutions and policies that control production, distribution and access to food. foodfirst@foodfirst.org
5.	Kitchen Gardeners	Monthly e-mail newsletter with information about food policy, recipes,

¹¹See: Cortese, 2003; Allen and Guthman, 2006; Uhl and Anderson, 2001; Lorzano, 2003; Lorzano, 2006; Lukman and Glavič, 2007.

¹² These are discussed in greater detail in Appendix Three.

	International	gardening tips and lessons, ideas for promoting organic kitchen gardens and sharing the harvest with others, etc. info@kitchengardeners.org
6.	Sustainability Planning News	News, articles, web resources and information pertaining to sustainability planning and sustainable development, including alternative energy issues. The author maintains separate lists for environmental and ecology-related issues, international development and globalization issues, smart-growth sorts of regional planning, and air quality planning. sustplan@yahoogroups.com
7.	Canadian Association for Food Studies	Allows researchers from diverse disciplines working at universities as well as public and community based organizations to meet regularly to identify research priorities and to share research findings on diverse issues dealing with food security concerns. owner-cafs@acs.ryerson.ca
8.	Community Food Security Coalition	The Community Food Security Coalition is a non-profit North American organization dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious, and culturally appropriate food for all people at all times.
9.	Leopold Institute for Sustainable Agriculture	The Leopold Centre is a research and education centre with state-wide programs to develop sustainable agricultural practices that are both profitable and conserve natural resources. leocenter@iastate.edu
10.	Pesticide Action Network	PANNA (Pesticide Action Network North America) works to replace pesticide use with ecologically sound and socially just alternatives. They link local and international consumer, labour, health, environment and agriculture groups into an international citizens' action network. panna@panna.org.
11.	The New Farm Newsletter	NewFarm.org presents expert resources for crop and livestock production, direct marketing, local food systems, policy campaigns and community-building collaborations. NewFarm.org is an electronic magazine covering the successes and challenges of organic and sustainable farming nationwide and beyond. At NewFarm.org, the mission is to inform, encourage, equip and inspire farmers with the support they need to take the important transition steps toward regenerative agriculture. newfarm.reply@rodaleinst.org
12.	Mother Earth Living	Bi-weekly news and advice on conscientious living, covering nine wise-living categories: Alternative Energy; Do It Yourself; Green Home Building; Natural Health; Organic Gardening; Whole Foods and Cooking; Homesteading and Self-reliance; Nature and Environment; and Livestock and Farming. motherearthliving@e.mailzeen.com
13.	EFS-Food	This is the discussion list of the Food & Dining Services Interest Group of AASHE (Association for the Advancement of Sustainability in Higher Education). efs-food@yahoogroups.com
14.	America's Second Harvest	The Nation's Food Bank Network - USA's largest charitable hunger-relief organization. info@secondharvest.org
15.	Sustainable Practice Network	The Sustainability Practice Network (SPN) is a NYC-based forum and list server for professionals, academics and students working with corporate responsibility and sustainability issues to build a community based on learning, discussion, information and idea exchange. SPN supports the growth of sustainability practice and bridges disciplines to advance sustainable development by drawing on the knowledge and expertise of its members. spn-discussion@lists.sustainabilitypractice.net.

3.5d Archival Work

I spent almost two weeks in the Queen's University archives in an effort to better understand the history and development of food services at Queen's University. Unfortunately, there had not been one central authority responsible for all food services until the mid-1980s. Since 1975, control over these records has been transferred to the office of Residence and Hospitality Services, and are not available. Despite these constraints, the archival process was rich and fascinating. I searched through a wide variety of holdings including those from the former Dean of Women, the minutes from residence councils and old advertising materials for the university. Piecing together a coherent narrative of food services at the university was complicated and at times impossible. However, as Patmore (1998) suggests, building an historical background is helpful in understand the present and framing contemporary policy debates.

Archival research often requires researchers to "fill in the gaps" with "innovative detective work" (Markey 1987:177). While many of the documents that I surveyed were official correspondence, minutes and contracts, there were still some points where a change or event was inferred rather than stated outright. One of the most significant examples of this was the transition of the Ban Righ Dining Room at Queen's University from self-operated to contracted. It appears from the minutes of Women's Residence Council that the Dean of Women responded to a request from the Vice-Principal of Administration to have a representative from Beaver Foods make an "inspection" of the facilities. The transition to contracted food services happened within one year from that visit.

3.5e Interviews

The purpose of this work was to uncover some of the processes and policies that impact the purchasing and provision of university food. In an effort to accomplish this, I conducted nine semi-structured interviews at the Universities of Guelph and Toronto, and Queen's University with Directors, managers and staff. I acquired ethics approval for these interviews from Queen's University General Research Ethics Board (see Appendix Seven). I developed an interview schedule, but the interviews remained flexible, allowing the interviewees responses to shape the direction that the interview took. I conducted three interviews 'on the fly' with Anne Marie Hunt, Gerry Kniehl and Reg Pierce¹³. All interviewees signed a consent form and allowed for the use of their names and the names of their organisations to be used. I was invited by Chef Colin Johnson to participate in a 'product cutting' where Sodexo tests new food products for use in their operations. Almost all product cutting for Sodexo is done at Queen's University. I was fortunate to participate in a gravy and soup-base tasting. I had been under the impression that the participants would be Chefs from the company, but two of Sodexo's directors of purchasing also came, as did Queen's University Corporate Chef, Reg Pierce. These interviews were mostly unstructured, but because I brought my research journal with me, I was able employ somewhat of an interview schedule. Whipp (1998) suggests that these kinds of interviews provide the greatest opportunity to reveal the views and values of the respondent.

I employed a hybrid of pyramid and funnelling interviewing strategy in the design of my interview schedule (Dowling, 2000). I began with questions that were non-threatening and easy to answer about the interviewees' duties and responsibilities. This allowed me to develop a rapport and gain the trust of my informants. Bradshaw and Stratford (2000) advise

¹³ See Table 2.4 'Interviews conducted for Master's Research' for descriptions of interviewees.

that maintaining rapport is the most important consideration in determining the order of questioning in an interview. All participants were provided with a letter of information¹⁴ before their interviews and I gave them ample opportunity to ask me any questions they felt necessary.

Bruce Griffiths, the Director Residence and Hospitality services, was my key informant and had initially approached me about my research following a food committee meeting. Snowball sampling, from my preliminary interview with Mr. Griffiths, was used to locate potential informants. Snowball sampling involves asking key informants to recommend other participants who might be interested in participating in a research project (Hay, 2000:196). My involvement in the different committees and participation in a number of events outside of them helped to build my profile with the administrators of food services.

Table 3.3 – Interviews Conducted for Research

	Name	Date	Position	Organisation
1.	Mr. Bruce Griffiths	Feb. 23	Director of Residence and Food Services	Queen's University
2.	Mr. Phil Sparks	Feb. 20, May 10, Sept 6	Resident Regional Director overseeing Sodexo Operations	Sodexo (Queen's University)
3.	Ms. Anne Marie Hunt	Feb. 26	Director of Purchasing	Sodexo Head Office
4.	Mr. Gerry Kniehl	Feb. 26	Director of Purchasing (Produce)	Sodexo (Head Office)
5.	Mr. Colin Johnson	Feb. 26	Executive Chef	Queen's University
6.	Mr. Reg Pearce	Feb. 26	Corporate Chef	Queen's University
7.	Mr. David Boeckner	March 3, Oct 3	Director of Food Services	University of Guelph
8.	Mr. Mike Schreiner	June 12	Vice President	Local Flavours Plus
9.	Ms. Anne MacDonald	July 24	Executive Director of Ancillary Services	University of Toronto

3.6 Conclusion

¹⁴ See Appendix Eight for the letter of information.

Overall, my qualitative research methods allowed me to uncover key themes and practices at the different institutions. The case study method has provided the opportunity for more generalised theorizing on policy development and organisational capacities. The findings will be discussed in the next Chapter.

Chapter 4 – Findings

4.1 Introduction

This chapter presents findings from the case study of food services at Queen’s University, using the Universities of Guelph and Toronto as context. I begin with a brief history of food services at Queen’s University and explore some of the developments that have shaped the current food services. In all three examples, I chose to focus exclusively on residential dining halls and on the mandatory meal plans associated with them.

4.2 Queen’s University

4.2a History of Food Services

The history of food services at Queen’s University began in the early 1900s, and is tied to the history of residences on campus¹⁵. The first campus residence, Ban Righ Hall, was built in 1925 for female students and contained a dining room and kitchen facilities¹⁶ (Queen’s

¹⁵ See Appendix Nine for a timeline of food services on the Queen’s University campus.

¹⁶ During the discussions surrounding the building of Ban Righ Hall, the University passed a ruling that made living in residence compulsory for all first year female students not living with relatives. In order to accommodate this mandate and to accommodate an ever-increasing number of female students, Ban Righ Hall was extended in the 1950s to include even larger dining facilities for up to 350 students. The dining

University Archives - Office of the Dean of Women Fonds). Men had access to the Student Memorial Union which was opened in 1928 and, while not a residence, housed all of the student union activities and provided cafeteria service exclusively for men (Queen's University Archives - Office of the Director of Residences Fonds).

Until the building of three men's residences on the lower campus in the 1950s, men lived primarily in rented rooms in private homes and ate their meals at the Student Union. Leonard Hall, which opened in 1959, housed the first common dining room open to residents and non-residents alike (Queen's University Archives - Office of the Director of Residences Fonds). The separate residence councils maintained these food services until 1972. The Women's Residence Council (WRC) was responsible for the dining services in Ban Righ Hall¹⁷, and the Dean of Women oversaw these operations. The Men's Residence Council (MRC) and the Director of Men's Residences were responsible for food service in the Leonard Hall Cafeteria, the all-men's dining hall that serviced non-residents males and those living in the three other all-male residences on the lower campus.

Until 1966, cafeteria food services were operated by the university and by university employees. Leonard Hall Cafeteria's food services were contracted out to Beaver Foods in 1966. In 1968, the university's VP Administration requested that the Ban Righ Board (which oversaw the operation of the Ban Righ Residence at this time) invite a representative of Beaver Foods Service to conduct a survey of the Ban Righ food operation with a view to the former presenting a proposal for the use of its catering service (Queen's University Archive – Office of the Dean of Women – Ban Righ Board Minutes). The Ban Righ Board

¹⁶ continued room was renovated again in the 1960s and renamed the Levana Dining Room, after the women's student government (Queen's University Archives - Office of the Dean of Women Fonds).

¹⁷ These were the only food services on campus available to women and serviced first the female students in Ban Righ Hall residences. In the 1960s, two more female residences were built: Adelaide and Chown Halls, whose students also used the Ban Righ Cafeterias (Queen's University Archives - Office of the Dean of Women Fonds).

accepted a proposal from Beaver Foods to cater its food services, stating in their meeting minutes:

The proposal was considered from the point of view of cost and also the desirability of a food service apart from cost. It was decided that the cost was competitive with our own budget projection. As to the desirability of a food service, it was felt that the Residence Administration, particular the Dean, would be relieved of a great deal of time-consuming and sometimes irritating details. As to the choice of a particular food service, there appeared to be no reasonable alternative, and the experience of the company concerned at the Men's Residences has been good. (Queen's University Archive – Office of the Dean of Women – Ban Righ Board Minutes).

Beaver Foods agreed also, to take over the current employees of Ban Righ, except for the dieticians. In their 1969 annual report to the Queen's University Alumnae Association, the Ban Righ Board stated that:

...[A] proposal from a catering firm, Beaver Foods, to undertake food service for the Women's Residences was considered, and approved... Subsequent catering has proved popular with the students, and has decreased substantially the administrative load of the Dean of Women (Queen's University Archive - Office of the Dean of Women – Ban Righ Board Minutes).

However, the report of the Dean of Women that year to the Ban Righ Board indicates that both she and the dietician had major reservations about food services of any kind:

We both agreed to co-operate with Beaver Foods in every way we could. Miss Bichad (Dietician for Ban Righ), although she has a strong objection to Food Services of any kind, gave her full cooperation too... I hope the Board will agree that whatever proposition come from Beaver Foods should be carefully examined by my Dietician and administrative staff and by the finance committee, before making any recommendations to this Board. I am in no hurry certainly to make any change in our organisation (Queen's University Archive – Office of the Dean of Women – Dean of Women's Report to the Ban Righ Board, June 1968).

These concerns, however, were subsumed under consideration of the financial benefits of making the change to contracted food services.

4.2b Food Management Contracts

Until 1970, residences independently negotiated their contracts with Beaver Foods. From this point onwards, the contract for food services at Queen's University is inclusive of Leonard Hall Cafeteria, Ban Righ Hall Cafeteria and West Campus Cafeteria. These contracts were renewed on an annual basis. The earliest contracts with Beaver Foods indicate that they operated under a Fee Management Arrangement (see Appendix Four). In Fee Management contract arrangements, the contractor is paid a set 'management fee' by the university to manage their services. The university provides the physical needs of food services, such as office space, dining halls and machinery. The food contractor provides the staff and skills to operate and manage the food service (see Appendix Four for a description of Fee Management). Their management fee was computed at a set rate per resident per day¹⁸ (Queen's University Archives - University Secretariat). In 1973, the management fee was five percent of gross sales, and in 1974 that changed to a more complicated system in which a flat management fee was paid to the food management company and the company was paid an additional set rate fee per resident per meal.

Beginning with the first contracts, complete control over purchasing and sourcing of food was the responsibility of the food management company. The contracts, beginning in 1968, also contain a provision that the food management company must "participate in the regular meetings of the student dining committee and [provide] assistance to students in food requirements for extra-curricular functions" (Queen's University Archives - University Secretariat, Beaver Foods Contract, 1969). These early contracts also made it the responsibility of the food management company to "maintain proper accounts and records

¹⁸ In 1967-1972, this was \$0.08 per resident per day (Queen's University Archives – University Secretariat, Beaver Foods Contracts).

of food services...all invoices, receipts and vouchers relating thereto” (Queen’s University Archives - University Secretariat, Beaver Foods Contract, 1969). This makes it difficult to determine where the contractor purchased food. However, there are some clues concerning purchasing in the minutes of different residence councils and dining committees. For instance, minutes from the InterResidence Council’s (IRC) Dining Committee from the early 1970s include passages about food and sourcing. Below are four such passages from the October 1971 and November 1973 IRC minutes:

Mr. Turnbull complained of lumpy potatoes. Mr. Fyffe (Rep for Beaver Foods) said that there would always be a few lumps since they cook enough for 1100 meals and it is hard to check. We are lucky since some universities get instant potatoes (10/71).

Mr. Marshall complained about the fact that there was no orange juice for 3 days. Mr. Fyffe said that [they] had to import orange juice from Oakville for 3 days since the local suppliers were out of it. They did have a little Tang which had to be rationed over the period. Mr. Marshall said there was no alternative for juice. There was apple juice inside the kitchen but he was told he could not go in to get it. Mr. Fyffe said he had made the local supplier stock up so that a crisis like this would not happen again (10/71).

Mr. Stasiak complained about the french fries being greasy and cold. Mr. Fyffe said we were not getting the same potatoes since this is when the local potatoes are sold for about 6 weeks (11/73).

Mr. Brett wondered when we would get some corn on the cob. Mr. Fyffe replied that there was none available worth buying and as soon as reasonably priced corn could be found we would do so. There would also be California tomatoes in the winter if the price was not too high (11/73).

Saga Foods, an American Firm, won the Food Services contract in 1975 after underbidding Beaver Foods and Versa Food Services. This was the beginning of Sodexo managed food services on campus. Marriott acquired Saga Foods in 1986, and then Marriott merged with Sodexo in 1998, becoming Sodexo-Marriott until Sodexo returned

to the singular Sodexho in 2001 (Buzalka, 2005). In 2005, Sodexho held a celebration for their ‘30 years’ on campus (Griffiths, 2007). From 1975 onwards, all records concerning food services, including contract and food committee minutes were transferred to the control of the Office of the Director of Food Services (Griffiths, 2007). Therefore, is it unclear when food services changed from annually renewed to longer-term contracts. The present contract with Sodexho expires in 2010.

4.2c Sourcing and Purchasing Issues

Phil Sparks, Sodexho’s General Manager at Queen’s University, in conjunction with Deodato and Sons¹⁹, their produce supplier, were able to identify where the core produce used in Queen’s University food service operations are sourced. Table 4.1 identifies which products Queen’s University food services are able to buy locally and when. Phil Sparks noted that other products are harder to trace. For instance, milk is purchased from Natrel, which is a Kingston franchise of a larger distribution company. The milk that is used at Queen’s University could only be traced to a particular region like Eastern Ontario, but not to a specific farm. This is due to the milk quota system in Ontario, which is a supply-managed market. Distribution and marketing of all milk in Ontario is controlled by the Dairy Farmers of Ontario, which is a cooperative owned by the province’s dairy farmers. Originally called the Ontario Milk Marketing Board, the Dairy Farmers of Ontario buys all of the milk from its member producers and then sells it to processors and distributors. All liquid milk sold in Ontario therefore originates from unidentifiable ‘local’ farms.

¹⁹ Deodato and Sons is a Kingston-owned fruit and vegetable wholesaling company. They provide the produce for most of Kingston’s large institutions including the Armed Forces base, the Royal Military College and the large hotels.

Table 4.1 – Local* food purchases by Queen’s University Food Services

Items purchased locally year round	Items not available locally	Items purchased locally based on seasonal availability	
Apples	Bananas	Asparagus	Napa Cabbage
Carrots	Clementines	Basil	Parsley
Cucumbers	Grapefruits	Blueberries	Parsnips
Mushrooms	Kiwis	Bok Choy	Peas
Onions	Lemons	Broccoli	Pears
Potatoes	Limes	Cabbage	Peppers
Turnips	Oranges	Cauliflower	Radish
	Pineapples	Celery	Rosemary
		Egg Plant	Spinach
		Garlic	Squash
		Ginger	Strawberries
		Grapes	Thyme
		Honey dew melon	Tomatoes
		Leeks	Watercress
		Lettuce	Watermelon
		Mint	Yams
			Zucchini

***‘Local’ in this context means sourced from Ontario or Québec.**

Sparks suggested that a major limitation was the student consumers who do not want to make the kinds of sacrifices in their diets that would be required to achieve a menu plan reliant upon local produce.

We don’t gear our menu to seasons, but we do take advantage when we can. Our operations aren’t in full force during the growing seasons. There is pressure to have more local food, but consumers will dictate what they want to eat. We work with their expectations and the willingness to sacrifice of [sic] consumers (Sparks, 2007, personal communication).

Sparks and Deodato and Sons also contend that no farming operations in Kingston could provide a stable, reliable supply of produce to meet their needs.

My impression is there just isn’t enough food here yet for us. That is why the Local Flavours Plus thing is kind of exciting. I’ve talked to Deodato about doing this and I think that we can make things happen. Head Office [of Sodexo] is already buying from the farms that Local Flavours Plus is certifying. So we’re already doing it. We just have to see what is going to happen in Kingston (Sparks, 2007, personal communication).

The perspective of Sodexho's head office, however, offers less flexibility. Kneihl argued that presently Sodexho "cannot guarantee the same kind of food safety from local producers. The biggest challenge for small producers is meeting food safety standards and food safety standards inherently favour large producers" (Kneihl, 2007, personal communication).

Queen's University's Sodexho office does not negotiate its own contracts with producers and therefore could not easily link itself to a local farm. As most foods are procured through distributors, a seller must gain approval from Sodexho's corporate headquarters and then in many cases demonstrate a capacity to be able to work with a distributor and potentially supply a large area (Sparks, 2007, personal communication; Matheson, 2006).

4.2c i Quality Control

All Sodexho foods served through food services go through what is called a 'product cutting' stage where different products are compared and tested to meet a variety of different food quality standards. Most 'product cutting' of foods for all educational operations across Canada occurs at Queen's University. Changes and experiments at Queen's University have a ripple effect on food services on other campuses. Vendor selection at these testings is rigorous. Kneihl and Hunt explained the different dimensions which they assess, other than taste-related rankings (like saltiness and consistency)²⁰. They also measure things like 'holding capacity,' which Hunt explained was "how long it takes a film to form on the top of a product. It's a quality thing, but also aesthetic" (Hunt, 2007, personal communication).

²⁰ See Appendix Five for a sample ranking sheet from the product testing.

Kniehl stated that packaging and volume of packing was also a consideration. Once a specific product is selected, Sodexho's Purchasing Department sets a contract with the supplier and then the purchasing department contacts a distributor to arrange for them to stock and distribute the products to the different Sodexho outlets.

Sodexho primarily purchases through an in-house group purchaser called "OnTrak²¹" which helps the company achieve a level of economies of scale that make it a powerful force in contract negotiations. Once a product is selected through a product-cutting, OnTrak establishes how many of Sodexho's contracts wish to also use the product in their operations. The Purchasing Department then sets the contract with the supplier based on a case price, which is determined by volume. Purchasing groups facilitate the consolidation of purchasing for many different companies or organisations (Nollet and Beaulieu, 2005).

4.2c ii Menus

In an annual meeting, Sodexho develops a university menu for all its operations in North America. This taskforce includes between fifteen and twenty Chefs, nutritionists, dieticians and other staff. They all have a hand in determining what and how much will be served. They use tools like a protein grid and nutrition guidelines to help with the menu development. The menus also pass through their Nutrition Department before being sent to the Canadian Head Offices in Burlington, Ontario where another team of chefs and food service professionals tweak the menu for the Canadian student consumer. For instance, grits, a popular menu item in the US, has been cut from the Canadian menu. At this stage the

²¹ OnTrak negotiates contract for Sodexho, but also works independently or cooperatively with other companies who engage in large volume purchases of food and non-food products. On their website they state that their services free Food Managers from having to negotiate. Their key supply partners include Unilever and Kraft. See Appendix Three for an examination of value-added food companies.

Canadian head office uses the Canada Food Guide to help inform portion sizes and nutritional values (Sparks, 2007, personal communication). Once this Canadian menu is developed, it is sent out to the different campuses, where in turn it is tweaked again and customized by their staff. At Queen's University that task falls to Colin Johnson, Executive Chef, who refines these menus based on customer feedback and popular items. He tweaks these menus each week in an effort improve overall customer satisfaction and fend off against meal-plan fatigue.

The Queen's University Sodexo operation is a flagship operation and a leader in Canada in menu development for two reasons. Firstly, Queen's University is a large university with a large number of food service users. Secondly, there is a large amount of skill on campus in the food service operations. Sodexo's corporate executive chef Reg Pierce has his office at Queen's University. Phil Sparks, the Sodexo General Manager was also a successful chef, as is their Executive Chef Colin Johnson. This suggests that there is a foundation at Queen's University for considerable innovation, and that the barriers to change are not necessarily with Sodexo's on-campus operations or within Food Services.

4.2d Economic Impact of Queen's University Food Services in Kingston

In Kingston, in 2001-2002, the direct economic impact of Queen's University spending was estimated at more than (CND) \$567 million. Of which the university spent (CND) \$36.5 million on local goods and services (Healey and Akerblom, 2003), which represents 22% of the University's spending on goods and services. Sodexo operates the food services on Queen's University campus and they handle the accounting records associated with the purchase of food and supplies. Therefore these are not reflected in University local supplier

figures. The Director of Food Services indicated in Healey and Akerblom's 2003 report that approximately (CND) \$1.7 million was spent locally to supply the food service operations at Queen's University²². For the 2006/2007 year, Phil Sparks stated that food services had spent approximately (CND) \$1.6 million on goods and services in the Kingston community. Mr. Sparks identified 'Kingston' as any company that they dealt with that had a Kingston address. This included 30 companies that ranged in services from providing ice blocks and chocolate fountains, to truck repairs and uniform cleaning. This figure does not account for the less direct impact of their operations, including the impact of their employees' spending.

4.2e Food Service Sustainability at Queen's University

Efforts directed at improving the overall sustainability at Queen's University have been limited at best. The most immediate efforts are the opening of the Tea Room in 2006 by the Engineering Society as a sustainable and environmentally friendly café on campus. Physical Plant Services has also created a sustainability assessment staff position, that is assessing the overall energy efficiency of buildings on campus. In the upcoming academic year (2007/2008) the Dean of Student Affairs has also created a sustainability office that will focus primarily on the residences. The Dean's office is also trying to coordinate sustainability efforts on campus, however at present, these efforts are happening in isolation from one another and none of these efforts point to a campus-wide recognition or focus on sustainability.

Food services' efforts can be explained in two ways. The first are efforts that come from Sodexho's head office itself that revolve around reducing packaging and trying, where

²² This is in addition to the \$567 million.

possible, to consider the ethical implications of a purchase²³. The second have been efforts by the food services administrators Bruce Griffiths and Phil Sparks. The sustainability in food services committee was struck this year (2006/2007) as a consultative body to explore sustainability. While the meetings were interesting, no significant progress has been made nor any action list struck for future action. As aforementioned, Phil Sparks has been in contact with Local Flavours Plus about bringing more of their products on board and the results of these talks will likely not be realised until next year. Mr. Sparks is a committed environmentalist and has been actively researching sustainable and ecological alternatives for food services for some time.

This kind of thing is important to me professionally, but also personally. I would love to build a home off the grid when I retire...Sustainability is really important to me, but it's just not that easy. There are a lot of people who don't care and people who do not appreciate when you make the effort. Well, there is not really that much support for it here (Sparks, 2007, personal communication).

Queen's University food services already mulches wet waste from its cafeterias. This is an innovative and forward-thinking approach to food waste. However, Kingston and the surrounding area lack a composting facility that could use this waste. So instead, 3,000 pounds a day of compostable material ends up in a landfill. While food services has researched possibilities for this waste, they appear to have received little support from upper level administration and are repeatedly told that the University lacks the appropriate site to compost itself and the resources to ship this waste elsewhere (Sparks, 2007, Personal Communication).

²³ Both of these efforts were explained to me by Gerry Kniehl from Sodexo. It could be argued that this serves as a way to take pressure off Sodexo and place it on their suppliers who bore the burden of making a change.

Therefore, without local opportunities or entrepreneurs and the support of upper level administration, this waste diversion in fact becomes a waste in the energy required to turn the food into compostable material.

4.3 Comparative Case Studies

Table 4.3 below lays out the key variables for comparison between Queen’s University and the two other universities. As was discussed in Chapter Three, the Universities of Guelph and Toronto were chosen because they have a number of similar attributes that make them suitable for comparison to Queen’s University. Some of the commonalities include:

- Guaranteed residence for first year students with a mandatory meal plan;
- Similar socio-economic, agricultural and climatic circumstances;
- Same seasonal and geographical limitations in regards to food access and transportation;
- Similar provincial and federal health and safety, and food safety regulations;
- Similar labour-shed in terms of food service executives and staff for recruitment purposes.

Table 4.2 below is from the 2006 Globe and Mail University Report Card. It shows the comparison among the three schools in terms of different ancillary university services including food services. The three universities rank comparably on most services, however, the largest disparity among the three is in food services.

Table 4.2 – Comparison of rankings among case study universities²⁴

Derived from Globe and Mail’s University Report Card, 2006			
Criteria	Queen's University	University of Guelph	University of Toronto
Academic support/counselling	B	B	C+
Campus bookstore	A-	B-	B-
Career counselling/placement services	B-	C+	C+
Co-op/internship opportunities	C-	C+	C-
Food Services	C-	B	D

²⁴ The University of Guelph is tied with the University of Western Ontario with its ‘B’ rank for Food Services as the highest ranked in Canada.

Helpfulness of administrative staff	A-	B+	B-
Library Services	A	A-	B+
Library hours of operation	A-	A+	B+
On-campus pubs/bars	A-	B+	C-
Overall Quality of Education	A	A	B+
Overall on-campus buildings/facilities	A-	B+	B
Overall quality of student services	A-	A-	B-
Recreational/athletic programs/services	C+	A-	B+
Satisfaction with University Experience	A	A	B
Service provided by library staff	A	B+	B
Student residences	B-	B	B-
	B+ average	B+ average	B- average

The University of Guelph, in particular, was chosen because of its reputation as a leader in food services and its more recent efforts to become a leader in local sustainability practices. At the University of Guelph, David Boeckner, Director of Food Services was interviewed. The University of Toronto’s New College, 89 Chestnut Street and University College were chosen because of their recent successful arrangement with Local Flavours Plus. At the University of Toronto, Anne Macdonald, who is the director of all Ancillary Services at the University was interviewed. She was also an active participant in the development of the sustainability criteria in the request for proposals that brought about the involvement of Local Flavours Plus²⁵. The University of Toronto is a difficult school to research, particularly in terms of its ancillary services, because it is run partially by colleges that have relative autonomy from the central administration. The university itself has the population of a small city and each college has its own separate food services arrangement for its students. Over the years, control over these services has been centralised and decentralised a number of times, adding a particular complexity.

²⁵ Local Flavours Plus is a non-profit, non-governmental, third party auditing organisation which certifies producers and processors as local, sustainable and ethically produced.

Table 4.3 – Comparison of Key Variables Between Three Case Studies

	Queen’s University	The University of Guelph	The University of Toronto: New College, University College and 89 Chestnut Street
Administrative location of food services within university bureaucracy	Dean of Student Affairs	Under AVP Finance	Director of Ancillary Services
Number of resident students	2,800	5,000	2, 550
Nature of resident students	Predominately first years	First years (guaranteed)	Predominately first year students with a mix of upper years.
Annual number of meals (approximately)	1,600,000	2,900,000	1,500,000
Contractor	Sodexo Brown’s Fine Foods	In-house – self operated	Aramark
Style of service	All you can eat (Board Plan) (Resident Cafeterias) Other retail service and flex dollars	Debit Services – includes cafeterias and retail services	All you can eat with flex dollars
Number of cafeterias	3 – Ban Righ Hall, Leonard Cafeteria, West Campus	4 - Creelmann, La Pit, South, the University Centre	1 - Audrey Taylor Dining Room
Alternative places to use meal plan on campus	Lazy Scholar, JDUC, Mackintosh Corry Hall.	16 (on-campus) and 10 (off-campus)	A wide variety of offerings
Vegan/Vegetarian options	Limited vegetarian and no vegan in retail services. Vegetarian/Vegan station in Leonard Cafeteria Kosher and Halal are also accommodated.	A variety	Vegetarian and Halal must be requested at each meal but cannot accommodate kosher or vegan

4.4 The University of Guelph

The University of Guelph is a relatively young university, even by Canadian standards. Founded in 1964, The University of Guelph is often recognised for its agricultural, life sciences and veterinary programs.

The food services at the University of Guelph have been self-operated since 1974; before that they were run by Versa Services²⁶. Originally, the University of Guelph operated its residence hall dining services on a board plan, similar to Queen's University, however, they switched to a debit plan (pay for what you eat). David Boeckner - Executive Director of Hospitality Services, said that the debit plan gave them better control and greatly reduced waste:

The total volume of our waste is very low. Our cafeterias run on a debit plan operation – so students pay as they go. That is different than the board plan at Queen's which generates a lot more waste. We don't require any waste stream diversion plan because we have such little waste... in 1974 we were on a Board plan too but we changed to the debit plan. It seems to make more sense when the students are paying for what they eat. They are more conscious of their waste (Boeckner, 2007, Personal Communication).

The meal plan is mandatory for all first year students living in residence. The four main cafeterias on campus serve 2,900,000 meals a year. Unlike Queen's University, the University of Guelph students can use their food dollars in a variety of locations with relative freedom. Called their two-in-one 'Basic Plan and Flex Plan'²⁷, students are able to use the Basic Plan for all on-campus food purchases (including retail and brand outlets) and their Flex Plan for vending machines and dining at off-campus establishments or delivery of pizza, pitas and subs (and taxis).

Food Services at The University of Guelph reports to the assistant vice principal of Finance. Mr. Boeckner said:

[T]here is a lot of support at admin services for food, other schools see ancillaries as non-core and farm them out and what happens is that it gets farther and farther away from the core values of a university. [With contracted services] there is obviously an administrator that is in charge of that contract with the caterer so you don't have the same community connection that I would have as an in-house operator (Boeckner, 2007, personal communication).

²⁶ Versa is now owned by Aramark

²⁷ 2/3 of the plan is basic and 1/3 is flex dollars.

Mr. Boeckner also attributed the success of the University of Guelph's food service to their retention of management and part-time staff. He suggested that this gives their services a continuity and bench strength that contracted food services could not replicate.

Each year, Food Services convenes the Hospitality Services Advisory Committee which meets every two weeks through the academic year. The committee is made up of 25 people, including faculty and on and off-campus students. Voting members of the committee are given a \$100 honorarium for fulfilling their commitment, which is added to meal cards²⁸. The Committee has five sub-committees: Financial/Planning, Ombudsperson Selection and Direction, Menu Planning, Communications/ Environmental, and Retail Planning. These sub-committees are integral to the operation of the Hospitality Services Advisory Committee, and where "the real work gets done" (Boeckner, 2007, personal communication). At their bi-weekly meetings, each sub-committee submits a report to the Hospitality Services Advisory Committee.

At Guelph, an Ombudsperson is chosen each year and is responsible for conducting surveys in the main dining halls and calculating the results. They submit the results to the Manager of a particular dining hall who then has to give feedback at the next Hospitality Services Advisory Committee meeting and demonstrate how they intend to make changes. Mr. Boeckner stated that the Managers' reports are an important mechanism for ensuring that student issues and concerns were addressed in a timely fashion, and 'close the loop' in addressing these. For instance, the University of Guelph's 2007 decision to stop serving cage-reared eggs was part of this surveying process. They added the question of whether

²⁸ Voting members are obligated to attend all meetings. If they miss two, they lose half of their honorarium and if they miss three they lose the whole thing.

students would be willing to pay slightly more for cage-free eggs to their student surveys. They also allowed animal rights groups to make presentations in the dining halls²⁹.

At the University of Guelph, students participate in the decision-making process at a number of levels. During the winter, the committee examined ways of keeping sick students out of the dining halls while at the same time ensuring that they got food and that they provided food in-demand such as increasing the number of broth-based soups. They also discussed issues of dietary concerns, recycling and seasonal decorations. Most important perhaps was a real sense of genuine commitment to making their food services the best they could possibly be and engaging the broadest base of the student population. Along the same vein, the financial concerns of the committee were well articulated through the meeting notes. Rarely however, were they presented as key limiting factors of considerations in their decision-making processes. What this suggests is a real ability to be innovative and flexible. The Food Services Director is given entrepreneurial licence, as is the Ombudsperson and those sitting on various committees.

As there is no higher approval process for these changes, decisions and actions can be made relatively quickly. This is a key dimension of the University of Guelph's overall success. Guelph also has student-focused dieticians that work with their executive chef and nutrition program that is run each year by two 3rd/4th year nutrition students. The students run an educational campaign called SNAP! (Student Nutrition Awareness Program) across campus to educate students about nutritional issues. These student coordinators run a number of other programs on campus targeted at improving the diet of students. The Fruit

²⁹ At Queen's in 2005/2006, Queen's Project on International Development and Oxfam were allowed to make presentations in the dining halls about fair trade coffee which is served in the halls. This gave these groups the opportunity to educate first year students about fair trade.

Card and Breakfast Energy Card rewards students who eat whole fruit and good breakfasts on a regular basis. A full card can be redeemed for a free fruit or breakfast.

4.4a Sustainability Efforts

Hospitality Services at The University of Guelph recently launched a local sustainability plan, the vision of which is “to be a recognised leader for local sustainability practices in a Canadian university hospitality operation becoming more environmentally responsible while remaining financially viable and satisfying the needs of our customers.”(Guelph Hospitality Services Local Sustainability Plan, 2007). Their plan involves updating and marketing their current initiatives as well as launching new ones.

4.4a i Current Local and Sustainable Initiatives

Currently, Hospitality Services operates a recycling program that recycles everything from paper, glass, plastic, metal, and cardboard, to the used oil from deep fryers. Hospitality Services also recycles their ink cartridges and uses recycled paper in their operations. They do not use any disposables in the dining halls and the majority of Hospitality Services are Styrofoam free and biodegradable corn/paper products are used as an alternative. Reusable mug and dishware use is encouraged through incentives across campus. They sell dishware at cost and provide convenient washing stations. They work to reduce waste through bulk purchases of condiments. Food items such as muffins or cookies are also displayed in bulk instead of in individual packaging. They make a large percentage of their food products from scratch, reducing packaging and preservatives. Hospitality Services also pushes their suppliers to reduce their packaging. Fair Trade Certified Coffee is available in 10-campus retail and dining hall locations and Hospitality Services follows the University of Guelph’s

Code of Conduct for sweatshop free clothing and giftware (Boeckner, 2007, Personal Communication).

In their cafeterias, locally supplied produce is purchased whenever possible (up to 41% of produce purchases are from Ontario during the growing season). Hospitality Services also works with the Meal Exchange program to donate to local food banks in Guelph, Fergus, Arthur, Mount Forest, Palmerston and Clifford – and excess food is donated to local shelters. Finally, they use Energy Star rated equipment wherever possible (Boeckner, 2007, Personal Communication).

4.4a ii Future Local and Sustainable Initiatives

While these efforts at the University of Guelph have already in many ways made them leaders in food services, their future initiatives are no less ambitious. Many of their efforts revolve around increasing and promoting the consumption of locally produced products and redesigning their menus and services to reflect more local and seasonal offerings. They are also seeking to build more direct relationships with local producers and initiate a ‘good neighbours’ marketing strategy that would include the local farm name on products sold on campus. See Appendix Six for more specific list of all of Hospitality Service’s future sustainability initiatives.

4.4b Other Efforts

The University of Guelph also benefits from its basic geography. It is located in an agriculturally prosperous region and is close to the Elmira Produce Auction. The campus itself is also relatively isolated from the downtown commercial district of Guelph, meaning that students have fewer viable alternatives to eating on campus.

The university is also home to a Bachelor of Science agricultural degree and an organic agricultural degree as well as strong agricultural research. The presence of these programs and other influences have resulted in a student body that is typically understood to be more engaged and politically aware of food than students on many other campuses across Ontario and Canada.

In the spring of 2007, students at the University of Guelph not only demonstrated their support for the use of cage-free eggs in their cafeterias at a higher price (which they were willing to cover) but they also voted³⁰ in a referendum to end their university's exclusivity arrangement with Coca-Cola when that contract comes up for renewal in August 2007. In the same referendum, students also voted in favour of selling exclusively fair trade coffee on campus, with a price increase of up to 10 cents a cup. In an interview with the Guelph Mercury, however, Boeckner said, "fair trade coffee is already available on campus, but it only accounts for about two per cent of sales" (Boeckner, 2007, personal communication).

4.5 The University of Toronto

Like Queen's University, the University of Toronto was founded by Royal Charter in 1827. My research has focused on the residential dining services that have made a commitment to the Local Flavours Plus program: New College, University College and 89 Chestnut Street³¹. New College, one of the University's bigger colleges was founded in 1962 and 800 students use its dining hall. University College has 750 students on its residential plan and 89

³⁰ Nearly 65 per cent of the 4,780 students who voted said they want an alternative supplier (Dharmarajah, 2007).

³¹ 89 Chestnut Street was previously a hotel that was bought by the university in 2003. Ancillary Services chose to retain as many of the hotel's old employees as possible and made the decision to operate the food services itself.

Chestnut St. is home to 1,000 students. All students living in these residences are on mandatory meal plans. Of the three schools examined, I have devoted the least attention to the University of Toronto. Initially this was because I had limited success contacting key administrators but it later became an issue of time and the sheer complexity of their administration.

Presently, Aramark runs the food services at New College. In the spring of 2006, the New College food services contract was up for renewal. It had been held by Sodexo for 16 years prior. With the help of Local Flavours Plus, the resulting contracts required increasing percentages and dollar values of Local Flavours Plus certified products each year. Eighty nine (89) Chestnut Street³² and University College also chose to begin purchasing through Local Flavours Plus. Aramark made an undisclosed dollar commitment in its contract to purchase Local Flavours Plus food. 89 Chestnut Street committed to a target of 10 percent of their food costs for the first year and University College made no specific commitment. 89 Chestnut Street exceeded their targets in the first year (2006/2007) and will increase their commitment to 15 percent for next year.

Two years ago, in an effort to improve the consistency of food services across those units which were under the control of Ancillary Services, Macdonald struck the Food Network Committee that consists of the different food management companies on campus, and the managers of self-operated and family-run services. Macdonald (2007, personal communication) said that ancillary services had “struggled for years with the notion that everyone is out there doing their own thing but there is no central coordination.” This group has allowed the different practitioners to meet and share best practice and coordinate as

³² 89 Chestnut Street is run by Executive Chef Jaco Lokker who was identified by both Mike Schreiner and Anne MacDonald as the key driver of sustainability efforts at that operation. His sustainability-focused projects are being modelled and emulated on other parts of the campus.

much as possible, while still remaining competitive. Local Flavours Plus first brought its proposal to this committee and it was here that some people chose to opt-in, some opted to wait and see how the first year went before signing on and some have decided not to participate.

Unlike Queen's University and the University of Guelph, however, the University of Toronto food services currently has no advisory committee, nor does Ancillary Services have a committee that includes students, faculty or the administration. Macdonald, however, has created one that will begin meeting in September 2007. This committee will include eight staff and six students. This group will work as an advisory committee to develop goals for food services around issues like sustainability or healthier foods. Each college and dining hall has its own individual food committees but Macdonald suggested that the discussions of these particular groups were pretty pedantic and specific to those individual services. They had what Macdonald called the "stale bun" discussions that revolved around personal preferences and concerns rather than big picture issues for food services. Macdonald was wary of allowing student preferences to carry so much weight and influence the direction of meal plan operations:

Having students who participate in the planning of food services is great and is very valuable but this is the same thing as going to a food committee [meeting] and complaining. Surveys and focus groups are great but are not the same as day-to-day input... There is a food committee which is ongoing here but is made up of operators, not student and staff who get together to complain about how the buns are always stale (MacDonald, 2007, personal communication).

These meal plan operations also administer their own student surveys to assess student satisfaction twice a year: once in October and another in the spring.

Perhaps the most striking difference among the three schools is that students appear to have very limited influence on the direction of Toronto's meal plans. Macdonald stated

that they do not need to have the best food services in the country because the foodscape of Toronto is part of the student experience:

Food services are not really valued. That is okay. On the St George Campus we are in the middle of the city of Toronto so you can leave and get lots of great food and food options. So we provide campus food services to supplement what's around us. We don't really feel a huge responsibility to have all the food provided on campus. Students want to explore the city. It's part of what makes the University of Toronto an interesting place to be. We don't feel a huge responsibility to meet everyone's needs or to make food services the best food services in Canada. This is not a big priority but they need to be pleasant and nice spaces that are well maintained, and we need to be providing good value. We try to do a good job, but it's not a priority (MacDonald, 2007, personal communication).

The University of Toronto is never going to be able to compete with the variety and quality of food that students can get by going a block off campus.

It is also clear that their efforts to introduce local and sustainable food through the Local Flavours Plus program was a result of Lori Stalhbrand and Mike Schreiner approaching Ancillary Services at just the right time. This was not because the university was actively seeking ways to increase its overall sustainability, but instead because it was in the process of writing a request for proposals for the turnover of food services at the New College residence. This gave Local Flavours Plus the opportunity to present their package more broadly to the Food Network Committee and get buy-in from directors and managers from across the different food services on campus (Friedmann, 2007). What the Local Flavours Plus relationship does for The University of Toronto more than increase its sustainability is provide a platform to differentiate it for its green efforts away from its university competitors. Macdonald also felt that if students could feel good about the food they were able to buy on campus, the university might be able to retain higher numbers of meal plan participants as students, like other consumers, vote with their dollars for environmentally conscious businesses. MacDonald said that the University does have an

Office of Sustainability, and while they had worked together in the past on projects, they do not have an ongoing relationship. The promotion of executive chef Lokker to the Director of Food Services seems to be a more likely catalyst for change, particularly if he can continue to generate support from the upper level of administration.

4.6 Further Results from Queen's University

This section examines the results from the case study of Queen's University and information from the universities of Toronto and Guelph. The first section reports on the information received from informants regarding sustainability and best practice in university food services. The second section reports on information with regard to the factors that they believe to be either hindering or facilitating sustainable policy or practice in food services.

4.6a Sustainability and Best Practice in Food Services

There was general consensus among informants that sustainability and, in particular 'local food' was playing an increasingly important role in the management and the marketing of food services. Many informants confirmed that the incorporation of sustainability was a critical issue for students, and that they also increasingly felt external pressure to at least appear to be operating with some consideration for the ecological dimensions of their practice.

First, I will explore how each institution perceived its efforts at improving sustainability. Informants were asked to describe these efforts:

We're really big into [locally sourced food] and have just developed a local sustainability plan. It's focussing on local and sustainability and our food miles we're taking into consideration. In the summer and fall it's not hard to get local but we are starting to deal more with greenhouses in the winter. We go to an auction one day a week in Elmira to buy from all the producers in the area. The purchasing manager or his assistant, along with a chef, go to the auction and they bid based on our requirements (Boeckner, 2007, Personal Communication).

Centrally we don't have one big food committee for that kind of discussion but are putting one together for this coming year. This one will work as advisory committee to develop goals for food services, like increasing sustainability or healthier foods. That group will be eight staff, six students and that group will work on big picture issues and quality control (MacDonald, 2007, Personal Communication).

The experience of sustainability and the operation of food services differed greatly among the three universities. At Queen's University, where the implementation of sustainable practices is limited, there was no coherent plan in place to move toward better sustainability. Instead administrators choose particular issues, such as waste stream diversion or cage-free eggs and work towards improvements in specific areas. At the University of Guelph, sustainability is a first and foremost consideration in all of the areas of operation of food services, from waste to sourcing and then other dimensions of retail and marketing. The University of Toronto had no clear overall plan for the university, though MacDonald indicated that, in the past, food services had worked with the Sustainability Office at the university and suggested that "maybe there are projects we could do on campus and maybe we could look at waste reduction strategies and energy conservation" (MacDonald, 2007, Personal Communication). This suggests that while the office is aware of environmental issues and their solutions, there is no immediate strategy in place to move towards more sustainable practices.

Critically, administrators viewed the issue of sustainability very differently. There seems to be a significant bifurcation in conceptualising sustainability as a marketing tool rather than an ecological necessity and as part of the responsibility of the institution.

MacDonald stated:

Sustainability is hot. It is very topical and is on everyone's mind. Every company now over the last year has bought in. Everyone who has a commercial enterprise is trying to show how green they are right now. I think that perhaps over the last year with Al Gore and the media attention there's all of a sudden [sic] the consumers are actually voting with their dollars and companies are seeing that there might be a commercial advantage to this – before it was let's be a good citizen, but now there is money to be made which is why there is so much uptake (MacDonald, 2007, personal communication).

Similarly, their motivations for striving to improve or incorporate sustainability measures demonstrates two key things. First, student involvement and participation is a key driver of the direction of food services. More precisely, the degree of student involvement and consultation appears to be linked to more progressive efforts by food services. Second, successful efforts require the backing and support of key members of the administration.

Bruce Griffiths at Queen's University stated that:

We want a student-driven program. If we make decisions for students we risk being very paternalistic and crafting their tastes. When people stop eating pizza, we'll stop supplying it. I've gone to a lot of schools and never come home and have been ashamed of what we serve here (Griffiths, 2007, Personal Communication).

Student involvement and engagement is solicited in a number of different ways. Satisfaction surveys and online questions are taken very seriously by some Food Directors and the role that this responsiveness plays in shaping market decisions is important. In my tour of the main cafeteria at Queen's University, I noticed in the back offices that student comment cards were tacked up on the walls. All the managers and chefs who I interviewed

stated that student input is taken very seriously, and suggested that a comment by one student is usually reflective of a wider consensus. Sparks spoke of the 'old days' of food service when they would offer one or two entrees compared to now when there are upwards of 30 different menu items available at any one time. Their items are also in flux all the time. Sparks described how in the previous academic year they "spiced up" many of their dishes as a result of student requests, but that this year (2006-2007), their most popular dishes were "comfort foods", like casseroles and meatloaves (Sparks, 2007, personal communication).

Griffiths explained, "students tell us in food surveys that they expect to spend \$20 a week on groceries" (Griffiths, 2007, personal communication). This suggests that food service decisions are being driven by a cohort that has no true concept of not only the cost of food, but also how much food they consume. This is the paradox of student involvement: simply including students on committees does not constitute effective engagement.

The University of Guelph engages students in a number of ways, including surveys and committees, but also by hiring students as key members of staff, responsible for the assessment and administration of food services. One of the interesting considerations at Queen's University, which I was unable to explore in greater detail, was the effort to improve the overall profile of both food services and its staff with students. This issue was raised at a number of Food Committee meetings and seemed to reach its peak following a particularly large food fight on St Patrick's Day, 2007. The fight was estimated to have cost food services directly (and students indirectly) approximately (CND) \$5,000. Students were invited to attend a meeting following the fight to discuss the impacts. Attendance was reasonable (30-40 students), however, many students chose instead to email their comments anonymously to food services. The quote below indicates that students do not see

themselves as part of the community that was responsible for the fight, or responsible for its resolution. They do not value or necessarily respect the workers. It could be argued that these comments are symptomatic of Queen's University students who are often identified as privileged with a deep sense of entitlement. Many of the comments suggested things like "well, the staff are going to be there anyways" and, "it's their job".

Food fights have a time and a place. They don't occur everyday and at every meal for a couple reasons. One reason being: most people don't want a food fight every meal, in fact: no one wants a food fight EVERY meal. People might be nicely dressed, in a hurry, or just eating a relaxing meal. However, everybody does like a good food fight. Paradox? Not really, as I said before, food fights have a time and a place. While I did not throw any food or involve myself at all in the food fight, I do think St. Patty's Day or the end of the year is a great time and place for a food fight. Everybody there is very jovial and happy, and they don't care about work anymore, or appearance or school. They just want to have some fun. Fun IS important to keep people sane. I don't think food fights (especially big ones) should be allowed to occur everyday, but if the consensus of the cafeteria customers approve a food fight (which is rare and acknowledged by participation), I don't think the threat of expulsion is warranted or justified. I understand that a food fight and damage to dish/glassware, etc., causes a huge mess and inconvenience for cafeteria workers. But it is detailed in the job. They know that at the end of the day, they need to clean up the accidental spills, food crumbs, messes, etc. Granted that a food fight goes beyond the typical mess and might be more costly, as long as a food fight happens only on rare occasions, I don't think it should become a problem. This university is here for student enjoyment and enlightenment. Both of which go hand in hand. If a food fight occurs, shutting the cafeteria down early is totally justified, despite the cut-off of access for students coming in later. The students caused the problem and they will deal with the consequences from each other. I don't believe the administration should get involved. The best solution might be allowing one food fight per year. Let us have some fun, we do work so very hard.

Many informants, who often suggested that in many ways food services was a thankless industry, repeated this battle of food services. Anne MacDonald stated:

The food operator is just a beleaguered job. It's one of those businesses you never want to be in. Everyone hates your guts all the time and it's a really, really difficult time. Keeping them interested and having them not hate the food is really a monumental task. It's hard coming up with a menu that

changes sufficiently at relatively low cost (MacDonald, 2007, Personal Communication).

Phil Sparks at Queen's University echoed these sentiments

One of our big problems is that students just don't know. Bashing food services is a common ground. Really, if we were doing something really wrong, hundreds of people would get sick. They accuse us of putting laxatives in the food. I even had the mother of a student call me once; she started talking and then stopped. She apologized because she said that she realised how ridiculous this all sounded now that she was saying it out loud. I had to laugh, but there is a real conspiratorial element to these rumours. Some of them have been around for years.

4.7 Enabling Best Practice

By compiling the results from my informant interviews and from my participant observation of food committee meetings at Queen's, I have devised a table (4.4) indicating those practices and policies that are essential to sustainable development of food services. This table acts as a set of indicators of best practice³³. It is not a definitive or exhaustive list but serves as a measure with which to compare the practices of Queen's University against others.

Expanding on this, I introduce what I believe to be the three key factors that enable best practice in university food services. Again, these factors are presented as necessary but not sufficient in enabling the incorporation and execution of sustainable development.

³³ Creating some measure for best practice is critical for assessing sustainability. I employ for this purpose, the language of 'best practice'. Best practice refers to the most successful models of practice that are emulated by other companies or institutions and diffused across an industry. This term is in some ways tricky as it is often presented as an unproblematic method for firm learning. As the work of Gertler (2001: 6) has demonstrated, these processes of learning and sharing are complex, often assessments of 'best practice' fail to identify the "principal mechanisms and channels through which learning-driven convergence is taking place". Nevertheless, 'best practice' provides some platform for comparative analysis and benchmarking the successes of particular institutions.

4.7a Indicators of Best Practice

Table 4.4 was developed using information gathered from my informants, along with research on other institutions who were incorporating sustainable development into their food services. The purpose of Table 4.4 is to provide explicit examples of sustainable practice. These have been identified in the right-hand column of the table. On the left side, there are three dimensions of sustainable development.

Dimension of Sustainability	Key Indicators
Environmental	<ul style="list-style-type: none"> a. Waste conservation or stream diversion projects: Recycling, composting, conscientious consumption (food wastage) b. Ecological orientation in policy at institutional level c. Ecologically-oriented food and product purchasing behaviour d. Efforts to purchase organic, GMO and chemical free foods e. Efforts to purchase cruelty-free animal products f. Strategy for reducing disposables used in food services
Health and Wellness (Social)	<ul style="list-style-type: none"> g. Use of regulatory approach (e.g., controlling portion-size and ingredients) h. Student focused dieticians or nutritionists i. Efforts to reduce poor quality or unhealthy foods i.e.: trans fats, processed meats, etc.
Economic	<ul style="list-style-type: none"> j. Ethical purchasing policy k. Local food security efforts namely through local purchases which allows local farmers to farm in a viable way and helps to isolate local community from external market fluctuations l. Effort to embed institutional food system into local food system

These categories and components on one level seem quite simple and straightforward, yet actually putting many of these things into practice is quite complex. An institution that incorporated all of these practices would be a benchmark institution. While many institutions, such as the University of Guelph, incorporate many of these indicators, our present environmental crisis would suggest that there are still considerable improvements to be made. I am not testing these indicators in this table, nor are my indicators meant to be

completely exhaustive of all plausible dimensions and programs that can improve the overall sustainability of food services. Instead, the indicators in Table 4.4 are meant to provide a mechanism to compare the programs at the three universities I have chosen to study. Also important is that the incorporation of sustainable policy is only as effective as the execution of its practice. Below I have outlined the three key factors that I believe are necessary, though not necessarily sufficient for achieving sustainable best practice. I have linked these to my case studies where appropriate.

4.7b Key Factors in Achieving Best Practice

There is little work assessing the best practices of universities' ancillary or non-academic services. As I have argued before, food and food service quality at universities are political issues rather than solely technical issues. The political strategies that aim to improve food services are contextually and spatially specific. The particular politics of place, which result in a unique food geography, are the result of balancing dimensions of a university's capacity with its culture. The following factors were developed through information gathered in interviews with informants. Informants were asked to identify those policies or practices which had enabled them or which would enable them to improve the overall sustainability in their food services. Although, in this case, these factors are linked explicitly to sustainable development, they might also be applied more broadly to any innovative efforts of university food or ancillary services. I have identified these three key factors under the following headings:

- 1) Local Procurement Capacity
- 2) Organizational Profile and Capacity
- 3) Student involvement

These factors are critical in answering the questions I identified at the beginning of my thesis: Why are some universities actively embracing a more ecological and “sustainable” approach to campus food services? What are the factors that enable or disable the implementation of sustainable ‘best practices?’ Who are the key actors that are determining the direction of food services? Briefly, the work of van Weenen (2000), Clugson and Calder (1999) and Shriberg (2002), warrant mention here as all three set about developing matrices and methods for determining the sustainability of universities’ policy and practice.

Van Weenen developed a system of assessing the dimensions, status and level of universities’ commitment to sustainability. While he does not invoke the language of Sayer’s moral economy, he does identify the issues of sustainable development³⁴ as providing “the imperative for university action” (p. 29). Van Weenen ranks the engagement of particular universities using his ‘Sustainable University Classification Model’ based on which elements of the university are engaged in sustainability. The lowest level of engagement is ‘University Operation’ as he considers the efforts to change the inputs and downstream effects of university purchasing and outputs as the simplest actions for a university to change to work towards sustainable development.

Clugson and Calder’s (1999) work on assessing the success of sustainability initiatives on university campuses identified a list of seven ‘critical conditions’ that were shared among different successful institutions:

1. The perceived integrity/credibility of a ‘sustainability champion’.
2. The endorsement of key administrative leaders.
3. How broad the benefits of an initiative would be - i.e.: which programs/departments would benefit.

³⁴ Van Weenen (2000) uses the acronym LIFE to argue ‘what sustainable development is.’ He identifies these issues as **L**imits, **I**nterdependence, **F**undamentals and **E**quity. Limits is referring to the limits of natural resources, and interdependence to humanity’s interdependent relationship with nature. Fundamentals suggest that sustainable development requires a fundamental paradigm shift in all aspects of the human experience from commerce to community. Finally, equity argues that sustainable development must reconcile issues of social justice and international equality if it is to be powerful enough to succeed.

4. How the initiative fits within the university's culture.
5. How well the initiative engages the university community.
6. The academic legitimacy of initiatives, theories, and other characteristics
7. The amount of critical resources the initiative generates - i.e.: grants, publicity, cost savings etc.

Shriberg's (2002) investigation into sustainability in higher education revealed common drivers in campus sustainability initiatives that include:

1. The presence of a "charismatic" and passionate individual who can act as an environmental leader
2. Support from top-level administrators
3. Activism from lower-level stakeholder groups, especially students
4. A collaborative decision making structure between these groups

Clugson and Calder (1999), and Shriberg (2002) caution, however, that the presence of all these conditions does not guarantee success. In the same vein, I would like to stress that my three factors are in no way an exhaustive list of conditions for best practice. As I stated above, I believe these factors are necessary but not sufficient to enable change. These criteria provide part of the answer to my research questions as they help to explain why some schools are more successful than others and who is driving this success.

4.7b i Local Procurement Capacity

In California, universities obviously have an easier time reorienting the sourcing of the food as they are not bound by seasonal consideration and have their choice of organic and non-organic producers, as well as all those that fall in between. When essentially all food can be (and is) grown locally, the success of a university's efforts to increase local food purchasing is more dependant upon its own internal organisation and not on the efforts of local producers.

The capacity of the local community to provide the food and mechanisms to supply local institutions is a critical factor in determining the success of the sustainability of food

services. Availability and access to local foods is important to increasing the overall proportion of these foods into food services. This availability depends on only the productive capacity of a particular region and the mechanisms that are in place to aggregate and assure supply. These mechanisms can take many forms, such as a farmer's cooperative, or, in the case of the University of Toronto, a third party organisation such as Local Flavours Plus, which can provide the same kind of service. Universities are huge buyers. As I already stated, Sodexo estimates that it spent (CND) \$1.6 million in the Kingston economy on food and services during the past year (Sparks, 2007, personal communication). The University of Guelph is able to purchase a large portion of its produce on a bi-weekly basis from the Elmira's Farmers Auction. Queen's University has no such similar sized food market within a geographically reasonable distance. The University of Guelph has also initiated and maintains a cooperative purchasing plan with other Canadian universities to help to purchase sustainable and local products. Currently, however, Kingston and its countryside lack adequate production to be able to supply Queen's University or any other large institution for that matter (Blay-Palmer, 2006).

The Leopold Centre for Sustainable Agriculture's "Institutional and Commercial Food Service Buyers' Perceptions of Benefits and Obstacles to Purchase of Locally Grown and Processed Food Project" revealed that most purchasers saw reliable supply and assurance of food safety as the key barriers to increasing their proportion of locally sourced foods. They were also concerned with the possibility of having to work with and organize between multiple vendors. The great benefit of the contracted food management company and its in-house group purchasing power is their ability to aggregate supply on huge scales. The alternative solution to this is local producers organizing in such a capacity as to meet demand cooperatively, or the Local Flavours Plus, third party auditor approach.

There are a number of successful programs that have sought to build these linkages. The 'GROWN Locally' project in Iowa is a 12 member cooperative that sells its products to local institutions. It was launched in direct response to the University of Northern Iowa Local Food Project. By employing the same kind of strategies as buyers use in their group purchasing practices, the GROWN Locally cooperative is an example of how farmers can successfully meet institutional demands and how their group venture has enabled them to invest in the necessary infrastructure and marketing mechanisms.

4.7b ii Organizational Profile and Capacity

This factor is the most complex of the three as it includes the bureaucratic structure of the university and the impact that this structure and organisation has on the ability of food services to incorporate sustainability into their operations. My informants at different institutions identified the importance of a key person in the administration or at the institution who was a 'champion' pushing sustainability and improvements in food services. I also found that leaders require endorsement and support from key members of the upper administration. Mike Schreiner of Local Flavours Plus states that their efforts at the University of Toronto were driven and supported by key members of the administration. Exceptional individuals took up the cause of sustainability and pushed for change. At Queen's University, the introduction of a monthly farmer's market resulted from the efforts of Joli Manson, the head purchaser for Brown's Fine Foods whose determination and commitment – as a voting member of the Food Committee and farmer herself – brought to fruition in twelve months what would otherwise have taken years. The farmer's market is a critical step in integrating the food environment at Queen's University with the local producing community, and helps to redress the disconnect between eaters and producers.

Shriberg's (2002) findings, based on interviews and surveys with 59 different universities who were all signatories on the Tallories Declaration on Sustainability,³⁵ cautioned against overstating the role of the 'transformation leader' and that such a person has to appeal to a diverse set of actors within the institution. Their success as leader or champion depends on their ability to appeal to "personal ethics at low levels in the organizational hierarchy while appealing to institutional strategic positioning (e.g., reputation and recruitment benefits) at higher levels" (p. 3).

As Clugson and Calder (1999) also suggest, the perceived credibility of a sustainability champion is as important as the efforts themselves. Countless undocumented attempts at pushing different institutions toward more sustainable or quality-oriented objectives have undoubtedly been made and been unsuccessful. Gordon Mann at the University of Guelph is often cited as the driving force behind the implementation and retention of self-operated food services there (Griffiths, 2007, personal communication). Mann invested 40 years in the food services there, and his legacy is a highly successful self-operated model of food services that has been exported to other universities.³⁶

The 'charismatic leader' or 'influential individual' who can push change through the different levels of administration at a given university is very important. This is also because the role of Food Services Director limits the ways in which these offices can be entrepreneurial. In fact, in my assessment, the Food Director is often not encouraged to be creative or necessarily supportive in sustainability efforts. At the University of Guelph, the

³⁵ The Association of University Leaders for a Sustainable Future (ULSF) is the secretariat for signatories of the Talloires Declaration (1990), which has been signed by over 350 university presidents and chancellors worldwide committing them to working towards increasing the sustainability of their universities.

³⁶ McMaster University and Windsor both brought consultants on board from the University of Guelph when transitioning to self-operated food services in the late 1970s and early 1980s. Boeckner spent two years at McMaster University in the late 1970s helping it to transition from contracted to self-operated food services. The University of Windsor's, who embarked on a similar transition as McMaster, has been less successful.

Director of Food Services only needed limited approval from higher levels of administration to make decisions. This gave him a far greater entrepreneurial licence than Griffiths enjoys. This was well articulated during the food services committee debates over the introduction of Starbuck's. One of the key dimensions of these debates was the push by some members to have the Food Committee commit to an ethical purchasing policy. Bruce Griffiths argued very strongly that this was "not the mandate of the committee," and further argued, in a letter to the committee:

As I noted from the beginning of the trial, the issue that has been most challenging to address are the concerns arising from the question of corporate ethics. I have contacted various offices within Queen's and there are currently no guidelines for measuring an organization's worthiness to do business with or have a presence on the Queen's campus. I do not have the administrative authorization to develop such standards on behalf of the institution (Letter to Members of Queen's Food Committee, May 26, 2006).

The issue was pushed farther, suggesting that with or without the support of the upper levels of administration, the committee could not simply adopt guidelines to guide its decision-making. Griffiths, who instead passed the issue onto higher levels of administration, rejected this suggestion as well:

I will also send a letter to the Associate Dean of Student Affairs (to whom I report) identifying the concerns that have been raised regarding Starbuck's and the issue of corporate ethics within food services in general. In this way the concerns of the committee and customers can make their way up the administrative structure of the university to the appropriate level (Letter to Members of Queen's Food Committee, May 26, 2006).

Clugson and Calder (1999) suggest that each university has 'a story that it tells about itself' and how particular movements fit into that story determines how readily issues will be taken up by the administration. This example also demonstrates the relative confinement in which Griffiths can operate, the lack of engagement and presence of upper levels of administration, reveals the low priority and the limited organisational capacity of food services.

The organisation of the bureaucratic structure of a university also seems to play a role in how effective food administrators can be. At Guelph, the success of their food services has been recognised by their key administrators. As a result, their Food Services enjoy great support from the Administrative Services office. They are considered integral rather than ancillary to the operation of the school. Contrast this experience with that of the University of Toronto where the structure of food services is very confusing. They have all three major Food Management Companies operating on campus, alongside a variety of self-operated units, private businesses and other vendors. They have only recently created a Food Services Director position to oversee university-wide food services. Until then, management was decentralised to the colleges. In an interview with Bruce Griffiths at Queen's University, he explained that Toronto has long been in a cycle of centralizing and then decentralising to their colleges, so whether this new position will be permanent or not is hard to say.

Queen's University Food Services operate with little administrative support; seemingly 'hands-off' from the upper levels of administration. They are administratively and physically separated from the other administrative offices on campus as well. No member of the upper level administration sits on the food committee nor seems to show any deep interest in increasing their involvement. The University of Guelph's food services generate a profit that would suggest that the incentives for a food services director are much greater. For schools whose focus is not profit there is little motivation to innovate or push for drastic change. More money for food services also means the potential to create more positions, particularly those that allow management more time to interact with students/customers and committees in more personal and ongoing bases. At Queen's University, they simply do not have someone with enough time (Griffiths, 2007, personal communication). At the University of Guelph, not only do they have highly active Hospitality Services Advisory

Committee but they also have a food Ombudsperson who is hired by that committee each year to conduct regular surveys and report back to the committee on a bi-weekly basis.

David Boeckner, Food Services Director at the University of Guelph argued that the farther food services are from the central administration of the university, the farther they are from the core values of the university. Being an in-house self-operated food service allows for a deeper ‘community connection’ between the food services administrator and the university. Boeckner also argued that the administrative support allowed him to not be as focused on the financial dimensions of food services and that he was therefore free to more deeply consider non-financial aspects, such as improving overall sustainability.

The organisation of the university environment is critical to the success of any food service. Where Food Services fit in the larger bureaucracy of an institution demonstrates how it is valued but also how much capacity that office has for change. As described above, one of the key differences between the University of Guelph and Queen’s University is the level of administrative support given to their food services offices. This is also a key dimension of campus organisation as Clugson and Calder (1999) suggest, initiatives have to ‘elicit the engagement of the community’ and in order to succeed must bring in critical resources like funding, student demand, and recognition and support from key stakeholders. It is much harder to build a profile from the ground up. Queen’s University has been slow to move on broader sustainability issues, which suggests that such initiatives lack a sense of legitimacy or urgency at higher administrative levels. Also though, as mentioned above, Queen’s University does not have a history of organized student pressure on political issues.

Inside and outside pressures are both important motivators for change. Pressure comes in many forms, from the need of a university to reinvent its image in order to attract students, to the efforts of students to reinvent their institutions. In any case, the message is

clear, these efforts do not seem to emerge in a vacuum and instead come as a result of broad societal pressures, combined with awareness and action on campus. Acknowledgement of the moral dimensions of their economic action³⁷ appears to require pressure from non-administrative staff and students. The University of Guelph's initial success can be attributed to the efforts of one forward thinking member of the administration, but the longevity of that has been sustained by the necessity of their food services to meet student satisfaction and expectations. This has meant diversifying their offerings to please a wide spectrum of consumers.

At the University of Guelph, student buy-in is achieved through the Food Services' efforts to actively engage the student population. In 2007, the decision to move to cage-free eggs for the students' breakfast service was put to student referendum. The University of Guelph more importantly, however, has a student climate that is receptive to such efforts and a campus agricultural college that puts food and agricultural issues more squarely on the agenda³⁸.

There is very limited interest and research at Queen's University targeted towards food and food-related issues. None of the graduate level or professional programs have food components. While there are limited courses at the undergraduate level, these are dependent upon available and interested faculty to teach them. There is no central rallying point, like in the University of Guelph organic farming degree program, where students could focus efforts. Though, arguably, the launch of the Farmer's Market at Queen's University, as well as initiatives to turn part of Queen's University west campus into gardens, suggests that there is momentum building. Interestingly at Queen's University, food

³⁷ See Chapter Two for discussion of the moral economy.

³⁸ One other key consideration, however, is that the number of first year residence students at the University of Guelph has not changed in over 30 years. It was 5,000 when David Boeckner started in the early 1970s and remains 5,000 today. The constant number of students may allow for easier planning and strategising.

services may be moving ahead of the curve. Sodexo partnered with the Farmers Market in the early spring of 2007 to have their executive chef prepare local seasonal soup that was sold at low prices to students. At the following Food Committee meeting, all parties seemed to feel that the event was a success. It gave Sodexo the chance to profile its interest in local food, and Queen's demonstrated to student food activists that the students have support from the administration.

4.7b iii Student Involvement

Different universities have different models and histories of student involvement and engagement. Shriberg (2002) suggested that activism from lower level stakeholders was critical for the introduction of sustainability initiatives on campus, and I would argue that it is similarly critical for any changes in food services.

Student involvement takes many forms. While Queen's University seems to be very responsive to student concerns, students do not play an integral role in the operation of food services. At the University of Guelph, there are a number of different ways that students can become empowered to take part in many aspects of food services. They can sit on the Hospitality Services Committee and participate in a number of other ways, such as designing and implementing healthy eating programs. I would like to draw a distinction between the Queen's University model of student involvement and that of somewhere like the University of Guelph. At Queen's University, when I was working through material at the Queen's University Archives, the evolution of student involvement seemed to indicate that students concerns had shifted from students being treated as young people to be cared and provided for, to more active participants through various incarnations of food committees to their present status as consumers, above and beyond all other considerations.

This factor helps to explain the success of the University of Guelph where students participate in an active capacity in food services decisions. They are regularly polled and able to vote in referendas on critical issues. Students are still the customers of food services, but their role is also more complex and involved, allowing for better engagement and potentially a deeper sense of ownership over food services. This appears to translate in food services that are ranked higher by their students but also enables collaborative progressive policy development, such as the incorporation of sustainability into their operations.

4.8 Barriers to Change

While I have identified some of the barriers to change within the enabler categories, I also wanted to highlight the work of Spence (1994) and Lorzano (2006, 2003) who identify key barriers of change that prevent universities from incorporating sustainable development into their operation. Spence's work deals specifically with innovation and change, but his model was applied to the university setting by Lorzano (2006). Lorzano identifies two complementing aspects that can work together (or separately) to prevent the incorporation of sustainable development into the university system: procrastination and power. Procrastination suggests that innovative ideas can fail to be implemented because key actors believe that the process/idea is too complicated and delay acting on it (sometimes also out of laziness or negligence). Power struggles also exist within the university between key actors fighting for a more public position or between groups or individuals competing for the same resources. In either scenario, time, energy and resources are wasted on efforts that are not focused on positive action or innovation.

Spence (1994) provides a list of reasons as to why different levels of resistance exists as barriers to change and the adoption of innovation:

1. To protect social status or prerogative;
2. To protect an existing way of life;
3. To prevent devaluation of capital invested in an existing facility or in a supporting facility or service
4. To prevent a reduction of livelihood because the innovation would devalue the knowledge or skill presently required;
5. To prevent the elimination of a job or profession;
6. To avoid expenditures such as the cost of replacing existing equipment, and of renovating and modifying systems already in operation to accommodate or to compete with the innovation;
7. Because the innovation opposes social customs, fashions and tastes and the habits of everyday life;
8. Because the innovation conflicts with existing laws;
9. Because of rigidity inherent in large or bureaucratic organizations;
10. Because of personality, habit, fear, equilibrium between individuals or institutions, status and similar social and psychological considerations;
11. Because of the tendency of organized groups to force conformity;
12. Because of the reluctance of an individual or group to disturb the equilibrium of society or the business atmosphere.

Both Spencer and Lorzano speak more to the human resources dimension of the politics of place, but I want to draw out two points in particular which I think are critical to my discussion. First, both Spencer and Lorzano identify reluctance and reticence to change as disablers. While in many ways this is hard to prove, personality and territorial behaviours play a key role in the uptake of any kind of innovation. Though I myself am reticent to speak to the personal politics of the different offices of Food Services that I investigated, this unwillingness to “disturb the equilibrium” seems to be a pervasive disabler of innovation. Second, and I think even more critically, is the issue of bureaucratic rigidity. This was explored in my first factor, which examined how the organisational capacity of a particular institution is key in determining how policy is introduced or becomes practice. Nevertheless, this rigidity also extends into how politics are practiced at a university and the limitations that bureaucratic structures place particularly on the role of the Food Services Director to innovate.

4.9 Conclusion

The case study of Queen's University food services helps to build some understanding of the unique geographical factors that may affect how that power is exercised. The context provided by smaller examinations of the Universities of Toronto and Guelph illuminated key mechanisms of effective policy implementation and also barriers to more sustainable practice. Queen's University had many enablers geographically and practically, including innovative administrators and the beginning of local organisation around a local food economy. However, food services lacks effective and demonstrated support from the upper levels of administration and is failing to effectively engage students. This assessment does suggest, however, that many of the key factors are in place for food services at Queen's to progress effectively towards more sustainable operations.

I want to reiterate that, although I consider the three factors to be necessary for incorporating and executing sustainable practice within food services, they are not necessarily sufficient or exhaustive. The efforts at Queen's, Guelph and Toronto suggest that there is contextually specific interplay of these factors that creates their place politics. However, it should be possible to replicate the successes of one institution. The benchmarks being set by the University of Guelph, particularly in terms of achieving the indicators of best practice, identified in Table 4.4 have been met by thorough and strategic planning, with broad-based support.

This is critical to the questions asked in the beginning of this thesis and provides some answers as to why some schools are better than others or more specifically why the University of Guelph is more successful than Queen's University.

Chapter 5 - Implications

5.1 Introduction

This chapter is divided into three sections. First, I explore the implications of my findings, as reported in Chapter Four, for informing the academic literature and building on the debates identified in Chapter Two. Second, I explore how this research addresses some of the gaps in the academic literature. Finally, I explore the policy implications of this research, which includes how food services can move more effectively towards sustainable development. I also identify opportunities for further research in this area.

5.2 Implications of My Research for Informing Current Debates in the Literatures

5.2a Diet for the Privileged Classes?

In my literature review and Appendix Two, I identified key research which argues that organic, local and alternative food constitutes an ‘elite’ diet (Morgan and Murdoch, 2000; Goodman, 2004; Crewe, 2001; Guthman, 1999 and 2004; Kloppenberg et al., 2000, Allen et al., 2003; Hendrickson and Heffernan, 2002; Lang and Heasman, 2004; Raynolds, 2000). In many respects this is true. These products are priced at a premium, limiting their

accessibility. Goodman (2004) argues that alternative food systems require greater investigation before we decide whether the benefits of these systems are exclusively the domain of niche producers and elite consumers.

Because of the exclusivity of university education, students would also constitute an elite consumer. They are privileged and in many instances appear to be the key drivers of the direction of food services and food purchasing. However, many important social movements have found their roots within highly elite circles, such as the suffrage and civil rights movements. It ultimately becomes a question as to whether the intent of these movements is to remain elite, or rather to challenge existing codes and norms of societal behaviour (Donald and Blay-Palmer, 2006). Although universities are elite institutions, there is precedent in universities taking leadership roles in apparently insurmountable tasks – such as the space race and cancer research (Uhl and Anderson, 2001). Universities are already incubators of research and innovation on alternative technologies and many are beginning to lead the way on sustainability.

Both Harvard and Yale University have embraced campus sustainability initiatives. Harvard's Green Campus Initiative includes a (US) \$12 million Green Loan Fund that provides interest-free loans to campus projects that will reduce Harvard's environmental impact (Campos and Lei, 2006). It also includes the Green Skillet Program where the different food services on campus compete to reduce their energy consumption. By their own account, the success of the program has come in the way of individual efforts on the part of exemplary staff, which include turning off ovens between serving periods, light sensors in storerooms and smaller toasters (Harvard Green Campus Initiative Newsletter, 2007).

Yale has developed campus-wide programs for paper recycling and energy procurement. They have a 'Green Fund' similar to Harvard's and are working to reduce greenhouse gas emissions. In 2001, Yale launched The Yale Sustainable Food Project. The focus of the project is to "nourish a culture in which the pleasures of growing, cooking, and sharing food are integral to each student's experience at Yale" (Yale Sustainable Food Project Overview, 2007). Since its inception, the project has introduced an institutional waste recycling project into its food services. By 2005, one-quarter of the food served in Yale's dining halls was local³⁹, seasonal, sustainable and student surveys that year indicated the 90 percent of Yale College students wanted more local, seasonal, sustainable food in the residential colleges.

5.2b Measuring the Value of Oppositional Eating

The three factors for enabling best practice start to address some of the criticisms of the alternative food literature identified by Clark and others. Namely, how is the delivery-end of the food system constructed by different actors, and who are these actors? Unlike the models traditionally studied in alternative food system research such as farm gate sales or farmers' markets, any evolution or change occurring in university food services does so within the confines of the conventional food system. Organisations and purchasers with the potential to make significant impacts on the food system (such as a large buyer, like a university) operate on economies of scale far greater than the average farm operation. The concerns and considerations of large purchasers are different from those of an individual consumer, particularly in terms of their key motivations for change in their purchasing habits. I argue that while alternative practices present a challenge to the conventional food system, more

³⁹ While Yale provides no definition of what is meant by 'local', they do provide information on their major suppliers which all come from Connecticut, New Hampshire or New York State.

effective and lasting change could be achieved by pushing large institutions (like universities) to incorporate sustainable practices into their food services.

Without suitable methods for analysis, the literature provides no way of understanding how large purchasers can successfully transition their operations. It is impossible to make the entire transition over night. We saw this in the issue over Aramark at the University of Toronto and its inability to meet their commitments. While companies seem increasingly willing to compete on their perceived sustainability, promise does not necessarily translate into practice.

My findings also raise issues of definition, that I discuss below, as major gaps in supply create a vacuum into which agro-food companies could position themselves to become 'local suppliers' in local markets, while still employing the same kind of practices and technologies that are antithetical to ecological and ethical production. As I also suggested in my literature review, many models of analysis have limited their conception of the consumer. Although I will explore the student consumer in more detail below, my research suggests that the impact of student consumers extends beyond consumption. They are active agents in the creation of the food chains that service them.

5.2c The Economics of Re-localisation

There appears to be significant economic potential from re-localizing public procurement in a university setting. In Kingston and the surrounding counties, Blay-Palmer et al.'s (2006) work suggests that the area currently has the capacity to provide all of the local requirements for beef and that there are other significant short and medium term opportunities for local production.

The Food Down the Road Movement in Kingston works to create opportunities for

local producers and facilitate relationships between producers and purchasers. Food Services at Queen's University spent (CND) \$1.7 million on local goods and services in the 2006/2007 academic year. Even small shifts in their purchasing budget could create enormous, sustained impacts on the local economy.

The University of Northern Iowa's Local Food Project was launched in 1997 with funding from the Leopold Centre for Sustainable Agriculture. In 1997, it signed on three institutions interested in purchasing local Iowan goods (University of Northern Iowa Local Food Project, 2007). By 2006, this increased to over 27 different institutions and nearly (US) \$1 million a year in local food expenditures. In 2003, the University launched the "Buy Fresh, Buy Local" marketing and consumer outreach campaign. Their efforts have been very successful and serve as a model for replication by other institutions and communities.

Similarly, the University of Montana launched a farm-to-college program in order to increase the amount of local food used in its food services. The University estimated that Montana's public institutions represented more than (US) \$33 million in potential revenue for local farmers and producers. Of the almost (US) \$3 billion spent on food in Montana in 2003, only (US) \$225 million was spent in-state (Schlegel, 2007). Like many public institutions, however, the University of Montana ran into problems with the model of public procurement that forced universities and schools to tender contracts to the lowest bidder in food provision. State laws prohibited the University from purchasing some Montana grown products because they were more expensive than products from other states. In May 2007, Montana's senate passed a Bill giving the state's public institutions more flexibility to buy Montana-produced goods. The Bill provides an exception in the *Montana Procurement Act* and

allows Montana institutions to purchase Montana-grown food within certain parameters, even if it costs more than another nationally sourced good⁴⁰.

The farm-to-college program at the University of Montana bought more than (US) \$500, 000 worth of local food from Montana producers in the 2005-2006 academic year. Their food director estimates that the change in the legislation will allow the school to increase their local food purchases to 20 percent of their total food-purchasing budget (Schlegel, 2007).

5.2d Ambiguous Language

Despite its importance, the debate of language and ambiguity in the literature ignores the more critical dimensions of how the use of language by the key actors shapes their actions and the food system. I found that language and definitions for ‘sustainability’ or ‘local’ were employed as stalling tactics, for intimidation or for narrowing the scope for action. The first two meetings of the Sustainability in Food Services Committee meeting debated the merits of sustainability as an idea, and what a reasonable definition would be. In other words, wasting time and delaying more critical and useful activities like reviewing the practices of other institutions or developing a plan for action.

Mike Schreiner and David Boeckner commented on the use of ‘food safety language’ by the large food management companies. Schreiner argued “[o]ne of the biggest impediments to moving forward to local food is food companies’ food safety requirements – they really do it in an intimidating way” (Schreiner, 2007, personal communication). The food regulations of these food companies are meant to ‘reduce risk’ but the rigidity of their

⁴⁰ According to Anne Marie Hunt of Sodexo (Personal Correspondence, July 3rd, 2007) there are no government of Canada or Ontario policies which impact their ability to purchase locally, nor does the North American Free Trade Agreement impact their purchasing decisions.

rules favour large processors. Gerry Kneihl from Sodexo told me, more than once, “[f]ood safety is our number one priority.” The questions we are not asking though, is what is safe food? Is safe food the same as high quality food, or nutritious food? Boeckner argued that the issue of food safety is:

[A] little bit smoke and mirrors when you get into quality issues. When you go to a catered facility the quality really isn't there, so why are they going through the processes they have to go through? You have to realise that some of these large caterers have large contracts with multinational companies and there is a resistant to deal with local from a cost point of view (Boeckner, 2007, Personal Communication).

Research should explore the idea that the purported infallibility and necessity of food safety regulations may be masking the true and paradoxical nature of corporate purchasing - that it serves to reinforce and perpetuate industry conglomeration through its support of other integrated agro-food corporations.

Language was also employed to narrow the avenues for necessary action. The Food Committee at Queen's University spent an inordinate amount of time discussing whether Queen's should purchase ethically-produced eggs (following on the decision at the University of Guelph to do so). In the discussions, most time was spent defining cage-free, versus free-range, versus cruelty-free. While coming to terms with these definitions is important, committing more broadly to ethical purchasing policies would force institutions to pursue the 'most ethical' of options, particularly when suitable examples of best practice exist. This would help to eliminate superfluous discussions such as those on the relative happiness of chickens.

During the winter of 2006, discussions of the Queen's Food Committee the Food Director ran a comment card campaign to assess overall student opinion on the introduction of Starbucks's coffee. This was in an effort to satisfy the objections of members of the food committee who strongly opposed this. The coffee was introduced into the Mackintosh-

Corry retail outlet on a 'trial-basis' and students, staff and faculty were given the opportunity to comment on its presence with comment cards or through email. These comments were then weighed against sales to assess whether the coffee would remain.

It was very clear from the beginning of the process that the comment card system was merely a method of satisfying the concerns of members of the committee who opposed the introduction of Starbucks onto campus. When the cards and comments were reviewed during food committee meetings, members of the Queen's community who had written out against Starbucks were described in ostracizing terms as 'those kinds of people' and while there were more anti-Starbucks comments than pro, those who were against were not perceived by the committee as reflective of the larger position of the rest of the University.

Simply using terms like 'local' is also problematic because unlike 'sustainable development', which is, multi-dimensional, 'local' is limited in its scope to explicitly link purchasing with improvements in food quality. If we are to use local foods to simply make unhealthy food, the movement has failed to make the broad-based change. Perhaps the most interesting part of the language surrounding this issue, however, was the use of 'choice' as the key determinant of whether or not to provide particular products on campus. I discuss the notion of 'choice' further below, but the use of such terms like 'those kinds of people' and 'choice' requires more critical examination.

5.3 Implications of My Research for Informing Gaps in Relevant Literatures

5.3a Public Procurement

Public procurement has been under examined as a key mechanism for increasing the overall sustainability of a university. The work of Morgan (Morgan and Morley, 2002; Morgan, 2006; Morgan 2007) and more recently of Rimmington et al. (2006) has examined the role that public procurement could play because of the substantial financial power they wield. Rimmington et al., (2006) argue that most corporations and organisations are interested in corporate social responsibility, and that sustainability is considered one dimension of this. I have only touched on public procurement as one dimension of sustainable best practice. Changing purchasing practices, however, is a highly complex process. Food safety regulations, especially those set by food management companies and other large processors may prove to be extremely prohibitive in creating opportunities for smaller local producers to gain access to the public procurement market. Local procurement capacity will also play a critical role. The importance of local organisation cannot be overstated, as the move to sustainability is necessarily regional in scope. As discussed, universities play a tremendous role in regional economies. In the city of Toronto for instance, the largest energy user is the University of Toronto (Hoornweg, 2007).

5.3b The University and Sustainability

The way in which universities administer and manage their ancillary services, particularly food services, could be, as Morgan et al., 2006:196 suggest, “the most important single factor in fashioning food localization.” As mentioned, re-embedding, as much as possible, the

universities' food system within its local food system is a critical dimension of overall sustainability. My first hypothesis, presented in Chapter Two, argues that the practice of food services has been normalized in such a way as to render invisible the ecological impact of their operations. Creative public procurement, purchasing food locally and working actively to explore and expand on the sustainability of food services has tremendous potential for reshaping not only the university environment but also the regional economics of local farming and food. As previously argued, the conventional food system is unsustainable and the planet is facing an environmental crisis. Universities have an obligation to reshape their food systems in such a manner as to not perpetuate unsustainable practices. If universities do not condone unsustainable practices, they are inherently complicit in them. M'Gonigle et al. (2006:xiv) argue that the university is a "locus for practical action" and this holds the key to sustainability. The potential for this kind of practical action has been largely unexplored, particularly the role that institutions can play. Uhl et al. (2000:155) argue that:

Our universities are much too timid. They contain enormous brainpower, but a dearth of vision, courage, and moral responsibility. By and large, they seem to be more concerned about 'training' students to fit into a status quo world that is unravelling, rather than forthrightly addressing the causes of this 'unravelling' and offering our young people a sense of hope and purpose. Our universities have great leverage but they fail to use it in creative and exciting ways.

Sustainable development in the context of universities generates exciting research, however, the failure of many researchers to explore ancillary services and the role that contracting out these services plays in the ability of the university to achieve sustainability has not been examined.

The difference in mandatory meal plans between a debit-plan and a board-plan seems to be critical in waste stream diversion. Boeckner at the University of Guelph argued that the debit plan greatly reduced their waste. At Queen's University students use their student card for entry into the dining halls and they have access to the cafeteria on an all-you-can-eat system. Not only does the health sciences literature suggest that this encourages greater consumption, but students are more wasteful with food.

5.3c Transnational Companies

Many Canadian university food services have been contracted, removing the management of purchasing from public control and placing it into the hands of Food Management Companies. These contracts operate in two ways: Fee Managed and Profit-and-Loss (for further discussion of the difference between these two contract models, please see Appendix Four). While this area is in need of more research, I believe that contracted food services, rather than those operated by the university, have reduced flexibility in their purchasing decisions. This supports Morgan's (2006; 2007) contention and my own that the manner in which a university runs its food services has significant potential to shift their ecological impact.

However, one could reasonably ask whether the University of Guelph could still be a benchmark institution if a food management company ran their food services. All of the factors identified as necessary for moving towards best practice are achievable by both self-operated and externally managed food services.

What makes the analysis of these companies even more difficult, especially in the case of Queen's University is that Food Services holds the records of their own operations. This includes the minutes from all committee meetings. Removing this information from

the public record has negative implications for research and analysis. In my own work, I was only able to access contract information and food committee notes and minutes which were from earlier than 1975.

Further analysis of food management companies can also be informed by the recent work of Wrigley (Wrigley et al., 2005; Coe and Wrigley, 2007; Wrigley and Lowe, 2007) which explores the international restructuring of the retail-driven procurement-systems. Largest Value-added Food and Beverage Processors in Canada and the USA, identified in Appendix Three, include Kraft Foods and a number of subsidiary brands that are included in OnTrak's list of supply partners. OnTrak Group Purchasing Organisation is responsible for negotiating all of Sodexo's major contracts for all of its educational and other operations. The degree of integration between these major companies is staggering and, as the work of Wrigley suggests, dangerously under-examined, as are the 'investment flows' that come from them.

5.3d The Consumer

The role that students play in the university food system is complex. My research indicates that the offerings of food services tend to be 'student driven'. This practice of responsiveness to consumer demands warrants further investigation as it points to serious failings in linking theory with practice. The majority of the health science literature on obesity and student consumption habits seems to indicate that this cohort is unprepared and incapable of making reasonable and responsible food choices. There is broad-based support in this literature for environmental interventions into food offerings and a regulatory approach in an effort to improve nutrition (Bronwell and Horgen, 2003; Acs and Stanton,

2005; Betts, N. et al., 1997; Cheadle A et al., 1991; Levitsky, et al., 2004; McArthur et al., 2000; Young et al. 2002).

Additionally, the notion of ‘choice’ must be unpacked. Choice is, in many ways, being shaped by the food industry. The lack of student-focused dietitians or nutritionists who can work at arms-length from food management companies on campuses suggests cost and satisfying consumer demands come before the more substantial issues of health and well-being. As I have said before, young people who in most cases have never even purchased their own groceries, are assessing food services. Furthermore, they lack the necessary real world experience to properly evaluate food quality and appropriateness.

5.4 Implications for Policy

While I have argued like Morgan (2006; 2007) that too often sustainable development analyses are too focused on the ecological dimension, this study has privileged the ecological rather than the social or economic dimensions of sustainable development. I have tried to introduce an argument for a regulatory approach to food services. The Hungry for Success study of Scotland’s school meal program argued that school meal programs should be treated as a health, rather than commercial service. I would argue that university food services have a similar obligation as research seems to indicate that environmental interventions alone do little to modify behaviour. Edwards et al. (2005) argue that where food services are the sole providers of an individual’s diet they should “do everything possible” to ensure that those people can consume an appropriate diet and further suggests that portion size control is part of this intervention and moral, if not legal, obligation.

Most importantly, however, policymakers and researchers must be increasingly critical and conscious of the power that we place in the hands of students to determine the

direction of food services. They are neither capable nor adequately informed enough to make their own decisions. This practice of privileging consumer choice over other considerations is dangerous, as witnessed by a national epidemic of obesity and diet-related illness. Being cognisant of health is a critical dimension of sustainable development. The concern of food service directors of appearing 'paternalistic' is well-founded but dismisses the responsibility that university administrators have for the well-being of their students. Exercising greater control over food choices is not more paternalistic than placing limits on hazing rituals or having guidelines for fieldtrips.

Unlike high-school students, university students have the opportunity to rank their universities in public nationally published forums, such as the Globe and Mail's University Report Card and the MacLean's Rankings. The power of these rankings cannot be underestimated as they have tremendous impact on the year-to-year evolution of the operation of food services. These annual rankings provide students with a powerful tool for public evaluation of food services. The overhaul of dining services at the University of California, Berkeley was spurred by an article in the Wall Street Journal that ranked the university last in food services as compared with several peer institutions (Lawn, 2005). These are examined in detail at food committee meetings in order to understand and then justify the place of Queen's University in these. Further investigation into the merit and applicability of these rankings, particularly on how universities respond to them, could help to explain why some schools seem better enabled to incorporate sustainable development into their operations and procedures. The indicators of best practice presented in this thesis are by no means exhaustive, and the limitations of these are that they do little to address the *actual* mechanisms and processes that facilitate learning between institutions.

5.5 Areas for Further Research

Though I have attempted to draw out the key factors that enable best practice, I have not provided an explanatory framework which could address how universities can or do learn from each other. Though I was not looking at institutional learning but institutional practice, I believe there is significant opportunity for exploring the dimensions of inter-institutional knowledge transfer, particularly in the context of ecological policy development.

We should be more wary of continuing to place the control of our food into the hands of transnational companies because they have played a huge role in the dis-embedding of the food chain – but also because their commercial obligations inherently limit the ways in which they can move towards sustainability. Their first priority is profit which will always make their efforts suspect. There is still considerable work to be done evaluating the role of these companies in the food chain - particularly comparing them with self-operated food services. As this is a Master's thesis my scope for analysis was limited. Greater investigation into the relationship between food safety and food quality, in the context of contracted food purchasing and provision is needed.

It is also important to develop a better understanding of the interconnections between these companies and other multinationals. While in many respects, the integration of the food chain is explored and much lamented in the alternative food systems literature, the role of food management companies is rarely (if ever) explored. Similarly, the role of third party organisations in facilitating re-embedding would be an interesting site of investigation. They simultaneously clarify and confuse the geography of local public procurement. In the case of the Local Flavour's Plus contract at the University of Toronto, opportunities were created for local producers, however, Aramark, the contracted food

service at University College, struggled to find suitable local products to meet its commitments.

Perhaps this is because sustainability is far too often framed as an event rather than a process. No large institutions could transition its operations overnight. Therefore, creating realistic timelines and targets for increasing the sustainability through increased local purchasing involves finding a balance between adequate supply and sustained demand. The development of sustainability will require the time-consuming task of building relationships and reliability in the system.

I also believe that food researchers should more actively embrace the work of Sayer (2000; 2004) on the moral economy as there are real fundamental philosophical issues around social and environmental justice that we have to address. We, however, need to be aware that while attaching this notion to the food economy in many ways places a moral imperative on action, morality itself is not absolute. Many of these notions of sustainable development must be considered in comparison with the other morally significant ideas, such as accessibility to education. Should public dollars be spent increasing the quality and sustainability of food served to university students, when those funds could be used to fund the education of an underprivileged student? Also, in the words of Sayer (2007), we cannot ignore the moral significance of class. The dynamics of the university cafeteria, particularly concerning the interactions of the food services staff and the students is another possible site of investigation.

Chapter 6 – Conclusion

6.1 Introduction

This thesis has provided some explanation as to why some universities are more successful than others in improving the sustainability of their food services operations. I have argued that increasing the overall sustainability of these food services is part of a moral food economy and as such these food practitioners have an obligation to address the some of the profound challenges in the conventional agro-food system. Re-localising their purchasing provides opportunities for increased sustainability and could also possibly provide sustained economic development for these schools' host communities.

In this thesis, I asked the following questions:

- (1) Who are the universities which are actively embracing a more ecological and “sustainable” approach to campus food services and why?
- (2) What are the factors that enable or disable the implementation of sustainable ‘best practices?’
- (3) Who are the key actors that are determining the direction of food services?

I began to address these questions in Chapter Two with a review of relevant literature from which I developed four key hypotheses:

- 1) The practice of food services has been normalized in such a way as to render invisible the ecological impact of their operation.
- 2) Many institutions are challenging conventional food practices with alternative sourcing, selection and waste management practices.
- 3) Food and food quality are political, rather than solely technical issues concerned with areas of nutrition. Political strategies that aim to improve food services are contextually and spatially specific.
- 4) Students are increasingly informing institutional practice, which may be problematical given new research on choice and corporate environments.

In researching the dynamics of institutional food systems, the struggles over who defines sustainability, consumer choice, and what constitutes choice, are political in nature. The relations between the different players and participants in this system are, on the one hand, well structured and ordered and on the other complex and unclear. Universities are sites of hybridity. They are spaces of competing identities and meanings. Post-structuralist theorizing allows for multiple co-existing interpretations of the consumer and the producer. It also allows for a more nuanced understanding of the nature of space. The development and deployment of food services are part of the production of universities as particular sites of identity and meaning.

6.2 Findings

As documented in Chapter Two and Appendix One, the food system is in profound crisis. The degree to which universities acknowledge the role of sustainable development as a key transformative tool for addressing this crisis is critical to explaining why some schools are embracing more ecological approaches than others. Models of efficient business practice, which often privilege cost over other considerations, have been the hallmark of the management of public institutions over the last several decades. Much of the critical

economic geography literature suggests that our society and economy are in transition. Universities and food services are part of that transition. There is therefore a need to examine the trajectory of food services in more depth, alongside attendant changes in the normative codes and regulations in the business of education. For many, the practice of operating with limited reflection on the ecological impact of their operation has helped to normalize non-sustainable practice.

There are a number of universities who are actively pursuing sustainability in their food services, including those mentioned in the previous Chapters. While this work is limited in the manner it can explore the motivations and limitations of the programs at different schools, the participation of Harvard and Yale in sustainability programs suggests that these schemes are moving into the mainstream.

The operation and organisation of food services, including (1) the involvement of students and (2) the commitment from upper levels of administration, are key factors in politicising food on campus. Few, if any, of the informants made key decisions because of health- or wellness-driven concerns. In the instances where food decisions were made in response to those concerns, the primary influence was not the food services administrators but student groups and other external actors with influence.

Most important, perhaps, is the role that students play in informing the institutional practices of their universities. At each of the three universities studied, the participation and influence of students took on entirely different forms. At the University of Toronto, the Director of Ancillary Services, Anne MacDonald, was uninterested in the so-called “stale bun committees” (i.e., student groups) that provided the only interactive platform for students to air their grievances with their food. She also was weary of students determining the direction

of food services. Compared with Queen's University, she seemed to be far more aware of their limitations as informed advisors.

At the University of Guelph, students play a critical and multi-dimensional role in the direction, execution and evolution of food services. Their ideas and input are taken seriously and the entire university community is engaged in voting on key or contentious issues. Guelph also employs student-focused dietitians and Nutritional Science students whose job is to improve the eating habits of their fellow students.

Queen's University falls somewhere in between the University of Toronto and the University of Guelph with regard to the spectrum of student involvement. More so than the other two schools, however, the role that students play as consumers seems to override the other kinds of influence they exert (or attempt to exert) on food services. The introduction of Starbucks on the campus is a small case study of how the purchasing behaviours of particular students overrode the significant public and organized opposition to its introduction. The issue of student involvement at Queen's is a paradox. Student governance is taken seriously, with students sitting on a number of food service committees. This suggests active involvement but, in reality, the dominant mode of involvement is somewhat conservative and 'non-active', in the sense that the majority who sit on these Committees support the status quo, which is also reflective of the normalized 'political apathy' mode of practice for broader student participation at Queen's. Nowhere was this more evident than during the debates over Starbucks entry into the Queen's campus. In the Food Services Committee, only two of the eight student representatives expressed concern about the introduction of a brand that had generated significant conflict on other campuses⁴¹.

⁴¹ Starbucks' entry into Kingston's downtown also created controversy. When the opening of a Starbucks was proposed in the downtown, next to a popular worker's cooperative café, it was delayed several times as the front windows were smashed, among other forms of protest.

The success of the University of Guelph stems from the capacity for students to participate in an active manner in food services decisions. They are regularly polled and able to vote in referendas on critical issues. Students are still the customers of food services, but their role is also more complex and involved, allowing for better engagement and potentially a deeper sense of ownership over food services. This appears to translate into food services that are ranked higher by their students but also enables collaborative progressive policy development, such as the incorporation of sustainability into their operations.

6.3 Implications

The three factors for enabling best practice provide some mechanism for not only comparing the practices of different institutions but also for exploring the ways in which food services can become more sustainable. These factors also suggest that it is appropriate and essential for food service directors to employ a regulatory approach in the management of food services.

Morgan's (2007) notion of the moral food economy warrants further research particularly in a non-European application. It provides a much-needed critical platform from which to argue for substantive change in the operation of public institutions. Dixon (1999) has argued that 'power' does not lie with the consumer or the producer, but rather in the middle of the food system. Dixon's finding is quite valuable in supporting my argument that we need to investigate more fully the impact of food management companies with regard to the sustainability agenda. Economic geographers can play an important role in documenting this 'middle ground' and the mechanisms that sustain it. Much of the research on 'alternative' food systems has focussed on new civic forms of trust and new producer-

consumer relationships. While this work is important, more study needs to be conducted on how 'sustainability' programs in food services are implemented. Institutional food services are a crucial site to explore because of their potential to radically change the way in which food is delivered and consumed at Universities.

Finally, challenging the conventional food system need not be revolutionary. Some of the solutions lie simply in structuring policy to promote the determinants of good health. In this case, the determinants are diet driven. Food retailers have a significant role to play in consumer diets, not only as the point of purchase of foods, but because of the power they have over consumer choices. Lang and Heasman (2004) suggest that these retailers 'hedge their bets' by providing a range of food items from the nutritionally valuable to the nutritionally useless, all packaged and presented together under the ethos of consumer choice. However, the greatest barrier to sustainability is not access to resources or a lack of ability; it is a dearth of vision and the constraints of localized politics. How universities confront the challenge of sustainability will have implications for not only food services but also for our ecological future.

Appendix One: The Crisis in the Food System

I argue that the conventional modern agro-food system is operating in such a manner as to be economically, socially and ecologically unsustainable. To the food activist, stating that our modern food system is in crisis is proof enough of the highly unsustainable nature of the way we feed ourselves. To most other consumers, however, the practices of the modern food system have been rendered essentially invisible. The consequence for eaters is that this has also hidden its ethical and environmental consequences. In this section, I will demonstrate that public procurement is deeply embedded in a food system that is in a profound crisis. Purchasing practices are helping to support a system in which all but the simplest of costs have been externalized. The system is in danger of collapsing under its own weight. The most recent food scares have drawn attention to the delicate symbiosis that exists between our food system and our health, and has demonstrated that even the smallest failures in this system, by virtue of its sheer scale and integration, have the potential for disastrous and widespread impact.

The Modern Food System

The modern conventional agro-food system dates from the end of the Second World War. This system is driven and largely developed by economic institutions in wealthy industrial nations (Tansey and Worsley, 1995). This post-War era witnessed the creation of a global food economy that privileged national policy agendas. The networks of transcontinental trade, established during the colonial era were cemented through a series of continental and international trade agreements. As a result, nations entered a period of increasing reliance upon imported staple commodities such as sugar and wheat. In North America, national programs, which were developed to manage national farm programs, involved a system of protective import and export subsidizes and resulted in chronic surpluses (Friedman, 1993). In Canada, this resulted in a reduction in the number of diversified farming practises and the reorientation of farmers into one dominant crop or animal product (McRae, 1999a). McRae (1999a) and Friedman (1993) argue that in Canada and the United States (US), respectively, this has resulted in the prioritising of national economic needs as the key determinants of agricultural policy formation. This emphasis resulted in a move away from a nationally diversified food system and self-sustainability.

Following the food crises of the 1970s, brought about by the Soviet Unions' emergence as a grain buyer on the world market, both Canada and the United States developed a series of policies to help insulate their markets and stabilize supply. In the US, there was a massive expansion of land under cultivation, aided by government support and encouragement. This helped to increase both countries' economic dependence on agricultural exports. Bolstered by the technological and petrochemical advances of the Green Revolution, industrial agriculture began a ground assault on the planet's most essential resources: land and water. As discussed in the previous chapter, these advances encouraged monocrop agricultural practices that are far more capital intensive, requiring a lot of inputs and machinery, but fewer workers. It is an unsustainable exploitative system that is deeply

dependent on oil. In Manning’s (2004) Harper’s article “The Oil We Eat”, he succinctly states:

By mining the iron for tractors, drilling the new oil to fuel them and to make nitrogen fertilizers, and by taking the water that rain and rivers had meant for other lands, farming had extended its boundaries, its dominion, to lands that were not farmable. At the same time, it extended its boundaries across time, tapping fossil energy, stripping past assets

Since the 1970s, industry conglomeration has resulted in the creation of powerful global agro-food multinationals, which through their ability to effectively source all products globally, have “rendered substitutable the exports (and farmers) of any nation” (Friedman, 1993, p.53). These companies have also been responsible for the shift of emphasis from agriculture, to food. They have in turn, redefined consumption practices, particularly in affluent countries, where consumers expect fresh high quality produce from around the world, with no regard for seasonality (Friedman, 1993). Consumers have come to face the unpleasant realities of this food system, which is supported by mono-crop agricultural practices that rely heavily on chemically intensive inputs. Friedman (1993) argues that American agro-food companies have worked in contradiction to US policy and thereby undermined its political authority. She cites examples of international collusion and intra-firm efforts that have allowed companies to continue operating with nations under US trade embargoes. These practices continue today, but the agro-food companies are larger and stronger than ever before. Born and Purcell (2006:1999) refer to this process as “the capitalization of food production.”

A system in Crisis

The modern industrial food system is differentiated from early food provision systems by a number of important distinctions. Table A1.1 details some of the primary differences. This table has been adapted from a table in Maxwell and Slater’s (2003) work, which focuses primarily on policy changes for developing countries. I have retained many of their original categories (in italics) with some additions and North American specific information.

**Table A1.1 – The evolution of food policy.
Old conventional agricultural system to modern integrated agricultural system**

	Food Policy ‘old’	Food Policy ‘new’
<i>1 Population</i>	6 <i>Mostly rural</i>	3. <i>Mostly urban</i>
<i>2 Rural jobs</i>	7 <i>Mostly agricultural</i>	4. <i>Mostly non-agricultural</i>
<i>3 Employment in the food sector</i>	8 <i>Mostly in food production and primary marketing</i>	5. <i>Mostly in food manufacturing and retail</i>
<i>4 Actors in food marketing</i>	9 <i>Grain traders</i>	6. <i>Food companies</i>
<i>5 Supply chains</i>	10 <i>Short – small number of food miles</i>	7. <i>Long – large number of food miles</i> 8. Vertical integration 9. Industry conglomeration
<i>6 Typical food preparation</i>	11 <i>Mostly food cooked at home</i>	10. <i>High proportion of pre-prepared meals, food eaten out</i>

		<ul style="list-style-type: none"> 11. Larger portion sizes 12. Higher caloric densities
7 <i>Typical food</i>	12 <i>Basic staples, unbranded</i>	<ul style="list-style-type: none"> 13. <i>Processed food, branded products</i> 14. <i>More animal products in the diet</i>
8 <i>Packaging</i>	13 <i>Low</i>	15. <i>High</i>
9 <i>Purchased food</i>	14 <i>Bought in local stalls or shops, open markets</i>	<ul style="list-style-type: none"> 16. <i>Supermarkets</i> 17. Nontraditional settings: gas stations, bookstores
10. Diet concerns	15	<ul style="list-style-type: none"> 18. Chemical additives 19. Antibiotics/growth hormones 20. Decreasing variety of foods eaten 21. Snacking and nontraditional meal times 22. Increased availability and marketing of unhealthy foods
11 <i>Food safety issues</i>	<ul style="list-style-type: none"> 16 <i>Pesticide poisoning of field workers</i> 17 <i>Toxins associated with poor storage</i> 	<ul style="list-style-type: none"> 23. <i>Pesticide residues in food</i> 24. <i>Adulteration</i> 25. <i>Bio-safety issues in processed foods (salmonella, listeriosis)</i> 26. BSE, avian flu 27. Antibiotics 28. Genetically modified organisms
12 Animal welfare issues	<ul style="list-style-type: none"> 18 Transport 19 Confinement 	<ul style="list-style-type: none"> 29. Confinement 30. Factory farming operations 31. Manure lagoons 32. Subtherapeutic dosing of antibiotics 33. Growth hormones 34. Genetic modification
13 <i>Nutrition problems</i>	20 <i>Under-nutrition</i>	<ul style="list-style-type: none"> 35. <i>Chronic dietary diseases (obesity, heart disease, diabetes)</i> 36. Increasing prevalence of these conditions among children 37. Intentional efforts at misinformation 38. Corporate influence on public nutrition policy
14 <i>Nutrient issues</i>	21 <i>Micronutrients</i>	<ul style="list-style-type: none"> 39. <i>Fat</i> 40. <i>Sugar</i> 41. High Fructose Corn syrup 42. Transfats
15 <i>Food-insecure</i>	22 <i>'Peasants'</i>	<ul style="list-style-type: none"> 43. <i>Urban and rural poor</i> 44. Urban, inner Suburban Food deserts
16 Environmental issues	23 Single defining events like the dustbowl, Exxon	<ul style="list-style-type: none"> 45. Salinization of soil 46. Global reduction in arable land

	Valdez	47. Globally decreasing farm productivity 48. Loss of genetic diversity 49. Petroleum dependency 50. Depleted fresh water resources
<i>17 Main sources of national food shocks</i>	24 <i>Poor rainfall and other production shocks</i>	<i>51. International price and other trade problems</i>
<i>18 Main sources of household food shocks</i>	25 <i>Poor rainfall and other production shocks</i>	<i>52. Income shocks causing food poverty</i>
<i>19 Remedies for household food shortage</i>	26 <i>Safety nets, food-based relief</i>	<i>53. Social protection, income transfers</i>
<i>20 Fora for food policy</i>	27 <i>Ministries of agriculture, relief/rehabilitation, health</i>	<i>54. Ministries of trade and industry, consumer affairs Food activist groups, NGOs</i>
<i>21 Focus of food policy</i>	28 <i>Agricultural technology, parastatal reform, supplementary feeding, food for work</i>	<i>55. Competition and rent-seeking in the value chain, industrial structure in the retail sector, futures markets, waste management, advertising, health education, food safety</i>
<i>22 Key international institutions</i>	29 <i>FAO, WFP, UNICEF, WHO, CGLAR</i>	<i>56. FAO, UNIDO, ILO, WHO, WTO</i>

The change in the food system has been nothing short of revolutionary and while new technology has allowed us to feed more people, overall agriculture productivity has been dropping since the 1970s; commodity prices have remained relatively stable, but the costs of production have risen dramatically. The changes in the system have happened rapidly, but also largely invisibly. As fewer and fewer people in North America are actually involved in the growing of their own food, there is a growing disconnection between the production and the consumption of food. In many ways however, food scares .such as the aforementioned E. coli contaminated Californian spinach, bring public attention to the dangers of this disconnect and the potential for disaster.

Production Crises

At the production end of the spectrum, the number of farmers in Canada has been steadily decreasing and the average age is getting higher. Farmers also increasingly have to subsidize their farm income by working off the farm. The 2001 Canadian census suggests that main-job farm employment has dropped dramatically in recent years, but the amount of land under production is at an all time high (Martz, 2004). The trend is toward larger farms requiring greater capital outlay in equipment but higher yields in an attempt to achieve economies of scale. The value and investment in farm machinery has been increasingly steadily since 1996. Farm profits have not increased since 1996 and operating expenses were at an all time high in 2001. The amount of arable land per person is decreasing. (Martz. 2004)

These economic realities are changing the way farmers grow our food. Contracts between large industrial livestock producers and farmers are becoming increasingly popular. Under these contracts, farmers become 'growers', raising the livestock for different companies. While they must build and buy all the necessary equipment, they do not own the animals themselves. Research in the United States indicates that the typical contract farmer borrows between (US) \$200,000 and (US) \$1 million to purchase machinery and construct barns (Stith, P et al., 1995). This loan is often secured with the farmer's home and property, while the contracts can be cancelled with as little as 30 days notice. Farmers now complain that they are unable to secure loans without already having secured contracts from these large companies. The companies state that the contracts are the best arrangement for both growers and themselves as they share the risk. Bowler (1992) argues that food-processing industries have been weary of purchasing the farms that provide their raw materials as the contract system provides insulation to them from the risks of production. However, many disagree. The profit margins are slim. For instance in the hog industry they can be as little as (US) \$10 per pig, and since the barns and facilities will only last for less than 15 years, after farmers have made their loan payments they are often making no profit at all (Stith, P et al., 1995). This system is based on the system pioneered by the poultry industry, which has been less than lucrative for the growers, but tremendously successful for the processors (Schlosser, 2002). The growers bear the full responsibility of environmental problems and any legal matters that arise from neighbours or the communities in which they farm (Schlosser, 2002). The proliferation of 'factory' style farming operations has serious environmental and public health implications. High concentrations of animals waste pose ecological dangers and more broadly the potential for widespread water and environmental contamination. Manure lagoons affect the lives of those who live near the farms. Manure contains over 150 gaseous compounds, including hydrogen sulphide, ammonia, CO₂ and methane. Any numbers of these compounds are associated with headaches, and nausea, as well as exacerbating the effects of asthma, and other respiratory problems. There is also of course, the horrendous smell. All of these things pose a serious environment threat to communities surrounding factory farms. The rise of contract farming also threatens rural communities; and ironically contributes to food insecurity among farmers and their families. One intensive operation can replace a number of smaller family operations. When a family farm leaves a community, so does income for local businesses and taxes for schools. Most often, the franchise farmers buy their materials and equipment from the company through the contract, again drawing money out of the local economy. Intensive farming units also tend to cluster in certain areas. This impacts property values, and community growth often declines (Stith, P et al., 1995).

Schlosser's (2002) *Fast Food Nation* reveals the gruesome details of the dirty underbelly of the evolution of the meat processing industry. The transition from a highly skilled trade to poorly paid assembly line process has resulted in not only, worker deskilling, but it has also compromised the quality of meat products. By extension, the increasing global production of meat is highly resource-intensive. Feeding grain to livestock is less energy efficient than feeding it to humans. In the US, the average feedlot operation uses 35 kcal of energy to produce one kcal of food, excluding the energy required to transport and process the meat (Horrigan et al., 2002). Factory farming operations are also reliant on dosing sub-therapeutic levels of antibiotics and expediting growth hormones. Extensive antibiotic use has become the management method to minimize herd losses because of animal proximity and poor ventilation. The sub-therapeutic use of antibiotics has implications for both human and animal populations. The Canadian Medical Association supports a ban on the use of antibiotics in animals because of the impact it could have on

antimicrobial resistance in human pathogens (McGreer, 1998). Resistant strains of salmonella or E.coli could be passed between species (ILO, 2003). A recent study has suggested that not only are these antibiotics present in animal meat, but because of the use of manure as fertilizer, these antibiotics are absorbed by the plants and are unknowingly consumed by consumers (Nierenberg, 2006).

Another important impact of this factory farming methods that keep hundreds, if not thousands of animals in close confinement, has been felt in the recent BSE and avian flu crises. The passage of BSE so effectively through the British meat supply was enabled by a system that privileged efficiency, cost and value over quality. The widespread effects of the avian flu are yet to be felt but nonetheless pose a serious threat to birds but also potentially to humans if the virus is able to mutate and pass to us. Similarly, the effects of animal waste getting into the water supply continue to have devastating effects on human health. The 2000 Walkerton Water Scandal, which killed seven people and sickened over 2,000 others, demonstrated the horrifying impact that E.coli (bacteria derived from cow manure) can have on humans.

It has also been linked to habitat destruction, particularly in Brazil where forestlands have been cleared for grazing. According to estimates cited by the World Watch Institute (Halweil, 2004) for each quarter-pound of hamburger made from Central American beef, 55 square feet of tropical forest containing 165 pounds of living plants and animals, is destroyed. The increase in meat consumption has been linked to a variety of health issues and a rise in chronic degenerative diseases, particularly cardiovascular and cancers. Nestle (2002) states that meat consumption contributes a significant percentage of the saturated fat in the American diet. The most obvious indication that something is gravely amiss in our food system is the number of obese and overweight children and adults. The North American obesity epidemic, it is anything but invisible. In its 2004 Report Card on health, the Heart and Stroke Foundation warned that 'fat is the new tobacco' suggesting that almost half (47%) of all Canadians are overweight or obese. According to Statistics Canada, in 2004, over 25% of children were overweight and obese.

Consumption Crises

Changing patterns of consumption pose a myriad of problems for the North American population. According to research, there is a link between portion size and consumption, and that out-of-home portion sizes are increasing (Young et al. 2002; Edwards et al... 2005). Young et al.'s (2002) study of portion sizes found that there were enormous discrepancies between USDA standard portion sizes and available food portions, most notably in the cookie category where portions were 700% in excess of standards. The study examined food that was available for immediate consumption and the authors argue that this access to oversized portions has a powerful influence on determining energy (calorie) intake on the part of the consumer.

Fine (2001:2) captures the heart of the issue in the introduction to his 'Political Economy of Diet, Health and Food Policy' where he states that "nutritional advice [has] apparently failed to convince the general public to eat more healthily". To a large degree this is what places responsibility on the shoulders of the food industry. While recognising that there are a multitude of factors that influence how and what people consume, students,

particularly, continue to demonstrate that when given the opportunity they will make the worst food choice available.

In 2002 and 2003, the World Health Organization (WHO) released an updated version of its 1990 Diet, Nutrition and Prevention of Disease report. The report identified the 10 leading factors for disease around the world. Six of these ten were directly related to diet and nutrition, and the WHO estimates they account for over one-third of all premature deaths worldwide (Lang and Heasman, 2004).

Lang's work talks extensively about the battle over nutritional policies worldwide. In developed countries, Lang argues that nutrition and food policy have been the poor cousins of public health policy (Lang and Heasman, 2004). He argues that healthcare and public health policy have trumped the development of a more individualized health policy, by focusing on what to do when people are already ill (Lang and Heasman, 2004). Lang problematizes the notion that the solution to the problems of diet-related ill health, which results in a litany of serious conditions such as obesity, diabetes and anaemia, can be found in medicines, surgery or healthcare. Instead, he argues, the solutions lie in structuring society and policy to promote the determinants of good health. In this case, the determinants are diet driven. Most important for this research, however, is that Lang identifies food retailers as 'the powerhouses' of the modern food supply chain. Food retailers have a significant role to play in consumer diets, not only as the point of purchase of foods, but because of the power they have over consumer choices. Lang suggests that these retailers 'hedge their bets' by providing a range of food items from the nutritionally valuable to the nutritionally useless, all packaged and presented together under the ethos of consumer choice (Lang and Heasman, 2004).

The work of Cheadle et al., (1991, 1993) examines the relationship at the community level between individual dietary practice and the grocery store environment. Their work suggests that community dietary practices may be easily reflected in observable grocery store indicators such as the availability of fresh fruits and vegetables. They found a positive and statistically significant correlation between the availability of healthful food and the reported healthfulness of individual diets. However, they were not able to make broad conclusions about the changes over time. The one important caution that is relevant to this research is that respondents to their surveys often overstate the nutritional content of their diets.

As suggested above, the consumption of fruits and vegetables, and healthy food choices are essential to healthy nutrition, chronic disease prevention, and weight control. Research into the role that food retailers play in individuals' diets warrants some examination here as it points to the responsibility that food service providers have to their consumers and the impact that choice and availability has on actual eating habits. The proceedings of the Fruit and Vegetable Environment, Policy, and Pricing Workshop, in 2002, which was sponsored by Centers for Disease Control and Prevention and the American Cancer Society produced a number of interesting summary papers that explore the importance of food retailers in determining the nutritional value and make up of a populations' diet. The workshop emphasized the importance of population-based interventions in promoting healthful nutrition (Seymour et al., 2004). Both Lang and Seymour argue that community health promotion and changes in the characteristics of the community environment can facilitate changes in health risk behaviours at the individual level (Cheadle, 2001). A recent study into food deserts in the U.K. by Cummins' (2002) found that while there was not a marked change in the participants' fresh fruit and vegetable consumption there was a noticeable positive psychological impact on the participants of the community where the 'retail intervention' had occurred.

Appendix Two: The Evolution of Agro-Food Geography Literature

To some extent, the direction of agro-food studies has followed a similar development pattern as economic geography and political economy. This pattern has followed a series of key academic trends. In the 1970s with the rapid increase in international trade, research explored the internationalisation of agriculture, production and the commodity market. This was followed by a newer emphasis on the social and cultural economies, and more recently an exploration of the role of the consumer as an active, rather than a passive agent in the economy. This cultural turn in the social sciences has been followed by a 'relational' turn, typified by the work of Latour and Rantisi who further explore the role of the consumer, and other actors in actor network theory.

The study of food is inherently interdisciplinary and while this brief summary links the development of agro-food studies with economic geography it could as easily be traced through the history and development of every discipline from English to biology. Because of the political economy nature of this research however, food research is best viewed through the lens of economic geography.

Globalization of the food system - the 1970s –globalization and crisis

There is a long tradition of agro-food studies in geography, tracing its history through the fields of rural studies and agricultural geography (Winters 2003a; Winters 2003b; Whatmore et al., 2003; Maxwell, 1996). It wasn't until the 1970s, that the literature witnessed an explosion of interest in the internationalization of agriculture which coincided with the emergence of the on-the-ground internationalization of agriculture. Analyses of trade had more often been at the macro scale. As international markets expanded in the second half of the 20th century, the increasing interdependencies between national economies and the internationalisation of agricultural trade became major foci of geographical research (Whatmore et al., 2003; Winters, 2003b). Research, at this time, anticipated that the rapid and relentless expansion of new food networks and production methods would eventually uproot and eradicate small-scale locally embedded traditional food practices (Whatmore et al., 2003). Research focussed heavily on what we now recognise as simple measures for achieving 'food security' through extending the international commodity trading system and ensuring a constant, adequate supply of staple foods (Fine, 1998; Winters, 2002).

The international food supply and commodity prices crises of the 1970s, as a result of the USSR emerging on the world market as a net importer of grain, were met with a global response. At the state level, efforts to ensure adequate food supply and by extension, national participation in the international commodity market often resulted in Keynesian-inspired efforts centred on deliberate and planned state involvement. This form of government intervention and support helped to provide a framework within which modern agro-industrial farming practices could expand and thrive. International efforts coalesced around the 1974 *World Food Conference in Rome*, which led to the creation of the *World Food Council*, and later that year, the creation of the *Food and Agricultural Organization of the United*

Nation's Committee on Food Security. The Conference aimed to develop global regulatory measures designed to harmonize supply with demand on a global scale, with a focus on creating a global food supply that was reliable, affordable and secure against risks and market shocks. These goals helped to privilege the industrial model of modern agriculture and trade as the mechanism to assure supply.

These new international institutions, which were able to fund and orchestrate research and development, and provide help to the world's farmers, went hand-in-hand with the Green Revolution⁴² (Nanda, 1995). These efforts, driven by the world's wealthier nations, were focused on creating global food security⁴³ through increased production. This emphasis on expansion and production pressed on through the 1970s when the reality of meeting aggregate food demand and stabilizing global commodity food prices proved to be difficult (Anderson and Cook, 1999; Maxwell, 1996; Winters 2003b). Anderson and Cook (1999:142) argue that the result of this project demonstrated that "large increases in food production did not necessarily improve food access by poor people." The modern food system and food policy development are still hindered by these simplistic notions of achieving food security. Without digressing into the many debates for and against the Green Revolution it is important to note that this input-intensive process became a model for the wilful promotion of the industrial model of agriculture that dominates food production today.

This model has externalized a number of important elements that have since become the central dimensions of the modern food security debate. Namely, the ecological impacts of widespread pesticide and fertilizer use: like soil erosion and depletion, the development of pesticide-resistant pests, the biotech intellectual patenting versus traditional seed preservation issues, the poisoning of both animals and people from increasing chemical usage and most importantly the loss of traditional sustainable agricultural practices and markets (Bowler, 1992; Buttel 1997; Goodman, 1999; Friedman, 1993; Guthman, 2004; Horrigan et al., 2002; Kloppenburg et al., 1996; McRae, 1999a). This model has also served to distance the producer from the eater; (Allen, 2003; Goodman and DuPuis, 2002; Lockie et al., 2000; Murdoch, 2006; Fine, 2004; Lockie, 2002; Reynolds, 2002; Renting, 2003; Roe, 2006) an issue I will revisit later in this Appendix.

Indeed, the global deployment of these agricultural technologies was not without critics. Many of the concerns centred on persistent levels of hunger despite production increases, the disembedding of traditional sustenance-based practices and financially prohibitive nature of the energy and input intensity of these new technologies (Beck, 1995; Nanda, 1995). The early 1970s world food crisis had shocked the global food system with unprecedented trading prices for staple foods, and caused an increase in emphasis in the literature on hunger and famine relief (Anderson and Cook, 1999). In 1974, at the *World Food Conference*, issues of food security for developed and developing nations dominated (Allen, 1999; Maxwell, 1996).

⁴² High yielding varieties of cereal seeds and chemical fertilisers and pesticides were introduced to India in the mid-1960s as part of a project by the International Rice Research Institute designed at improving yields (Beck, 1995).

⁴³ While the definition of food security has gone through countless evolutions, for my purposes I argue that the goal is a secure, affordable and healthy supply of food.

Commodity Systems Analysis

By the 1980s agriculture had become a major source for increasing export earnings for many nations, rather than a vehicle for self-sufficiency (Nanda, 1995). The fiscal realities of recession in Canada as in other nation-states in the 1980s however, forced the retraction of many aspects of the welfare state, and responsibility for food security was pushed increasingly outside of the public realm and onto third party organisations. The policy shifts of the 1980s were also met by changes in the literature and a resurgence of more political-economy oriented approaches. This was epitomized by Friedland's (1984) classic work, which introduced commodity systems analysis (CSA) as a method for investigating the changing nature of food systems during this period. The world market was changing with the inception of new trade agreements and neo-liberal policies of trade liberalization. CSA had a profound effect on food systems research. It acknowledged the broader shift in agricultural practise, including the move away from self-sufficiency-oriented mixed farming and towards single commodities and market-driven consumption, and conceptualized commodities as having both a social and physical presence. Previous research had focused on the economics of particular commodities, rather than exploring them in the *systems* in which they operate (Friedland, 2001). Friedland et al.'s 1984 study of the California lettuce industry sought to "undertake an analysis of the social organisation of lettuce production in an identical fashion as, for example, the making of automobiles" (p. 6). Friedland's work using CSA aimed to "recognise when and where interpenetration of systems occur, where the system being analysed touches upon other systems or is significantly affected by others" (1984:223). This model provided a framework for understanding the intricacies of the problems facing agricultural communities and farm families, and for analysis of emerging agro-food systems (Watts et al., 2005). Friedland's (1984) work isolated five foci for studying agricultural commodities: 1) production practices, 2) grower organization and organizations, 3) labour as a factor of production 4) scientific production and application and 5) marketing and distribution systems. Critically, this work allowed for the analysis of the system, which moved food from the farm to the supermarket, and beyond the confines of simple commodity analysis which were limited to one (or very few) dimensions of a commodity.

Friedland's work was not without criticism, however. Dixon (1999) argues that the CSA approach adopted by Friedland and others is limited by an incomplete examination of the actors, processes and dynamics that change a commodity into a product. In her case for adapting CSA, she stresses the need to identify the *social actors* who affect the availability and acceptability of commodities. Dissatisfaction with the hegemony of many political economy approaches has made geographical approaches more receptive to the role of culture as an important mediation of all aspects of life (Morris and Evan, 2004; Dixon, 1999). The result has been the emergence of a cultural economy approach in the economic geography literature and this increased sensitivity is referred to as the 'cultural turn' or the 'new economic geography' (Barnes, 2001). This new economic geography also looks at the role that social embeddedness and trust play in shaping economic activities (Goodman, 2002). Dixon (1999) argues that such a culturally-minded approach should be blended with Friedland's framework in order to account for and analyse absent processes and actors. Dixon's adaptation is based on the contention of Arce and Marsden (1993:298) that economic judgements are "culturally determined and are institutionalized in society." She suggests the introduction of other foci of study, most importantly, food services practices and the role of ready-to-eat food provided by caterers and institutional food outlets. This

lack of study surrounding food services impacts both our ability to understand the role of the institutional consumer in the food system, but also the organisation and power of institutional food buyers, such as universities. Dixon's (1999) work also suggests that power in the food system lies not with the grower or the consumer but in the intermediary stages of the food chain.

Friedland (2001) summarises her argument in his reprise on commodity systems analysis by saying that "[p]ower is located in between, with supermarket retailers and, to a more limited extent, with fast food producers but taking into account nutritionists, market researchers, and specialists in cultural symbol manipulation". Pritchard (2000; 2) argues that while CSA studies have added valuable insight into the field of agro-food studies, they failed to "generate explicit theorization of the structures and strategies of transnational agro-food capital" and that research on agro-food corporations has served "primarily to position these entities within their socio-spatial landscapes". He further argues that the research frameworks developed do not "enable the construction of models to account for the dynamics or strategy and structure within transnational agro-food corporations".

Goodman and DuPuis (2002) argue that analysis done using the commodity chain framework has been concentrated on uncovering the social relationships behind the production of a particular commodity. This perspective gives little agency to the consumer and no value or political purchase to the commodity itself. In commodity chain frameworks, the only value attributable to a food or food product is its exchange value in the market. As Goodman and DuPuis (ibid) rightly suggest, consumers are presumed to be passive because they interact with the commodity only in the sphere of circulation (the market). This leads us into a further examination of the consumer in agro-food studies.

The emerging role of the consumer

As discussion and debate surround food systems developed, the role of the consumer has become a central point of contention. Political economy approaches dominated food security theory in the 1980s and this informed the analyses of agro-food systems. A number of authors attempted to situate the consumer within the commodity systems analysis framework, or to override and dismantle this method all together. One of the most notable is David Goodman (2002), who seeks to embed the consumer more firmly into agro-food studies, and argues that a number of recent studies essentially fail to give consumers true presence and agency. Murdoch and Miele (1999) remark on the emergence of a new and more discerning consumer who searches for a healthier diet and rediscovery of traditional cuisines. Goodman (2002), however, feels that this unexamined categorization is problematic and that this attempt to reconfigure our understanding of production and consumption is one-sided, as consumers are still defined in market terms as agents in a new culture of consumption.

Raynolds' (2002) study of consumer/producer links in Fair Trade coffee networks synthesizes commodity chain analysis and actor network theory. This work makes three important additions to the analysis: 1) the role of actors and action in the realm of consumption, 2) the symbolic and discursive factors of commodity networks and 3) the competing conventions organizing commodity networks.

The works of Marsden have broadened the economic nature of commodity chain analysis (Arce and Marsden, 2003; Marsden, 2000; Marsden, Bank, and Bristow, 2000) placing

significant emphasis on 'food politics' and, rather than focusing on chains, looks at 'food supply' networks. By nuancing the language, Marsden is able to investigate the interactions between governance and consumer groups (Raynolds, 2002). However, Raynolds (2002) suggests that the macro-sectoral focus and emphasis on formal food regulations rather than commodities limits the scope for discussion of actors and actions in consumption.

Appendix Three: The Agro-Food Industry

Industry conglomeration has marketed all sectors of the agro-food industry. It is estimated that agro-business owns approximately 75 percent of US food production (Future of Food, 2004). Their power and influence is truly staggering, and as will be discussed later, achieving economies of scale for these companies has resulted in the widespread adoption of energy-intensive industrial agricultural practices. Because the system works so effectively to deliver food to consumers, the environmental and social and political impacts of the system are invisible to most consumers. Roberts (CSF, 2007) argues that because most people think the food system is ‘working’, food has been depoliticised and suffers from very limited public involvement.

The most powerful players in the agro-food industry focus their efforts on the highly lucrative value-added possibilities of the market. Increasingly at home, when we eat out and on university campuses, the ‘brand’ has become as powerful a player in our food choices as it has become in our choice of running shoes. The massive power of food processing companies bears witness to our obsession with convenience and familiarity, and a quick survey of the brands that are held by the five largest value-added food and beverage processors reveals our other obsession with sweet, salty and fatty snack foods. Table A3.1 demonstrates that many of the brands, of which we are most familiar, are held by a very small number of companies. As was indicated by one of my informants, Food Management Companies often deal with these large processors, favouring them in their contracts. As I will discuss later, this places a number of limitations on the ways in which small, local farmers can access institutional purchasers.

Table A3.1 – 5 Largest Value-added Food and Beverage Processors in Canada and the USA, 2005

<p>1. Tyson Foods Inc. (Springdale, AR) Overall Food Sales (2005): (US) \$23, 899 million Employees: 107,000 (2006) Divisions: IBP, Tyson Seafood Co., Mexican Original Inc., Tyson Prepared Foods, Tyson Specialty Products, Tyson International, The Pork Group Brands: Barney’s, Black Forest, Bonici, Casino Chef, Cobb, Colonial, Copperfield’s, Corn King, Delightful Farms, Deli Slices, DFG Foods, Doskocil Foods, Fresh Cuts, IBP, ITC, Iowa Ham, JAC PAC Foods, Jefferson, Jordan’s, KPR Foods, Lady Aster, Mexican Original, Our American Favorite, Pizzano, Pizza Topper, Restaurantic, Reuben, Russer, TNT Crust, TastyBird, Thorn Apple, Weaver, Wilson, Wilson’s, Wright, Tyson</p> <p>Major Product Areas: Beef, pork, poultry, frozen and prepared foods. *In 2007 Tyson announced that all its Tyson-branded chicken will be grown without antibiotics.</p>
<p>2. Kraft Foods Inc. (Northfield, IL) Overall Food Sales (2005): (US) \$23,293 million Employees: 90,000 (2006)(US) Divisions: Kraft Foods International, Kraft Foods North America Brands: A-1, Aladdin, Alpen Gold, Athenos, Back to Nature, Baker's, Balance Bar, Blendy,</p>

Boca, Breakstone's, Breyers, Bull's-Eye, Café Hag, Callard & Bowser, California Pizza Kitchen, Calumet, Capri Sun, Carte Noire, Celis, Certo, Cheez Whiz, Chips Ahoy, Churny, Claussen, Clight, Club Social, Comet Cones, Cool Whip, CornNuts, Cote d'Or, Country Time, Cracker Barrel, Creme Savers, Crystal Light, D-Zerta, Daim, Dairylea, DiGiorno, Dream Whip, Eden, El Caserio, Estrella, Ever Fresh, Figaro, Foster's, Freia, Frisco, General Foods International Coffees, Gevalia, Good Seasons, Grand Mere, Great Grains, Grey Poupon, Handi-Snacks, Harvest Moon, Hoffman's, Hollywood, Jack's, Jacobs Kroening, Jacobs Monarch, Jacques Vabre, Jell-O, Kaffee Onko, Kenco, Knudsen, Kool-Aid, Korona, Kraft, Kraft Free, Lacta, Light n' Lively, Louis Rich, Lunchables, Magic Moment, Marabou, Maxim, Maxwell House, Milka, Minute, Minute Rice, Miracle Whip, Miracoli, Nabisco, Nabob, Old English, Oreo, Oscar Mayer, Oven Fry, Peanott, Pebbles, Philadelphia, Planters, Poiana, Polly-O, Post, Presidente, Prince Polo, P'tit Quebec, Q-Refresko, Ritz, Royal, Saimaza, Sanka, Seven Seas, Shake 'N Bake, Shipyard, Simmenthal, Slim Set, Snack Abouts, Sottilette, South Beach Diet, Splendid, Starbuck's, Stella D'oro, Stove Top, Suchard, Sugus, Sure-Jell, Taco Bell, Tang, Temp-Tee, Terrabush, Terry's, Tobler, Toblerone, Tombstone, Trakinas, Triscuit, Trolli, Vegemite, Velveeta, Wheat Thins, Yuban

Major Product Areas: Biscuits/crackers, cheese, dairy, grain products, meat and poultry, sugar/confectionery, miscellaneous

3. PepsiCo Inc. (Purchase, NY)

Overall Food Sales (2005): (US) \$21, 186 million

Employees: 168, 000 (2006) (US)

Divisions: Frito-Lay North America, PepsiCo Beverages North America, PepsiCo International, Quaker Foods North America

Brands: Aquafina, Aunt Jemima, Chee-tos, Diet Pepsi, Dole, Doritos, Frappuccino Coffee Drink, Fritos, Funyuns, Gamesa, Gatorade, Grandma's Cookies, Lay's, Lipton Brisk, Lipton Iced Tea, Lites, Mirinda, Mountain Dew, Mug, Near East, Nobby Nuts, O'Grady's, Parkers, Pepsi, Pepsi Max, Pepsi One, Propel, Quaker, Rice-A-Roni, Rold Gold, Ruffles, Sierra Mist, Slice, Smartfoods, Smith's, SoBe South Beach, Storm, SunChips, Tostitos, Tropicana, Tropicana Pure Premium, Tropicana Season's Best, Walkers

Major Product Areas: Beverages, bakery, miscellaneous

4. Nestle (U.S. & Canada) (North York, Ontario & Glendale, CA)

Overall Food Sales (2005): (US) \$19, 941 million

Employees: 15,000 (US) 3,500 (CAN)

Divisions: Beverage Division, Chocolate & Confections Division, Culinary Division, Frozen Food Division, FoodServices Division, Foreign Trade Division, Ice Cream Division, Nutrition Division, PetCare Division, Sales Division

Brands: Baby Ruth, Butterfinger, Carnation, Chase & Sanborn, Coffee Mate, Contadina, Drumstick, Friskies, Friskies Alpo, Friskies Mighty Dog, Goobers, Hills Bros., Juicy Juice, Kerns, Libby's, MJB Coffee, Nescafe, Nestle, O'Henry, Ortega, Raisinets, Stouffer's, Stouffer's Lean Cuisine, Sweet Success, SweetTarts, Taster's Choice, Toll House, Turtles, Willy Wonka

Major Product Areas: Canned, frozen and preserved foods, sugar/confectionery, beverages,

miscellaneous
5. Anheuser-Busch Cos. Inc. (St. Louis, MO)
Overall Food Sales (2005): (US) \$11,546 million Employees: 30,183 (2006) Divisions: Anheuser-Busch Inc., Anheuser-Busch International, Busch Agricultural Resources Inc., Anheuser-Busch Packaging Group Inc., Busch Entertainment Corp. Brands: Anheuser World Select, Azteca, Bacardi Specialty Malt Beveages, Bud, Budweiser, Busch, Hurricane, King Cobra, Michelob, Natural Ice, Natural Light, O'Douls, Rio Cristal, Tequiza, Ziegenbock
Major Product Areas: Malt beverages
Fusaro, 2005; Murray, 2007a, 2007b, 2007c, 2007d, 2007e

These five companies also constitute a significant proportion of shelf space in the average supermarket shelf, and presumably in the kitchens of the average North American. Jaffe and Gertler (2006:143) argue that the agro-food industry has waged a “double disinformation campaign to manipulate and re-educate consumers while appearing to respond to consumer demand.” What is also very interesting about Table 4.2 is that the ascendancy of Tyson Foods is a very recent phenomenon, and points to even deeper integration in the food system⁴⁴.

Food Management Companies

The other significant value-added agro-food industry is the food management business. I will go into particular detail about Food Management Companies, as they are the major providers of food services on university campuses. Like other segments of the agro-food industry, food service provision is dominated by a small number of very large companies. Their products are supplied by an equally small number of very large product procurement companies. The landscape of the food management industry has undergone a profound period of change since the mid 1990s. For the better part of a decade, the industry has been characterized by extensive consolidation as a result of a period of frenzied mergers and acquisitions. The result has been a clear stratification of the industry, which is now dominated by the “Big Three” companies: Aramark Corporation, Compass Group North America and Sodexo, Inc. The merging of Sodexo with Marriott Management Corporation in 1998 signified an important period of consolidation that began in the 1970s. Food contractors had typically been regional providers until this 1970s point, but efforts to extend their geographical reach and create economies of scale set the stage for large aggressive acquisition deals (Buzalka, 2004). Industry observers contend that it is Sodexo

⁴⁴ Tyson was originally a chicken processing company but through extensive mergers and acquisitions, they have come to dominate the processed food market. Operating on a global scale, Tyson is able to achieve awesome economies of scale and can operate with greatly diminished concern for the perturbations of the market. These different companies are horizontally linked through group purchasing organisations which allow them to achieve even greater economies a scale in purchasing often chiefly from other highly integrated supplies or corporations.

that set the tone for the aggressive competition for contracts and market share among the big three companies. An industry publication entitled, *Food Management*, has published a Management Company Top 50 list since 1998. Of the 50 companies listed in 1998, only 27 remain as independent companies.

Table A3.2 - Largest Food Management companies in Canada and the USA, 2005

<p>1. Compass Group (U.K.)</p> <p>Annual Sales: (US) \$7,400 (million) *Worldwide the Group has annual revenues of (US) \$19.5 billion Major segments served: Business and Industry (28%), Healthcare (20%), Recreation (20%) Vending (12%) Number of contracts in North America: 8, 342 (College and university clients: 210 in the US, 70 in Canada) Sustainability/Quality initiatives: signatory of the United Nations Global Compact. <ul style="list-style-type: none"> - Sustainable seafood purchasing policy (annually purchase one million pounds of fish) - Purchasing policy to curb antibiotic use in turkey, pork and chicken production - Pledge to use only cage-free eggs in Dining facilities - Have some policy about GE in California </p>
<p>2. Aramark Corp (Philadelphia)</p> <p>Annual Sales: (US) \$7,130 (million) Major segments served: Sports/Entertainment (19%), Business and Industry (16%), College/University (14%), Healthcare (14%), Corrections (14%) Number of contracts in North America: 4,240 (400+ college and university clients) Sustainability/Quality initiatives: <ul style="list-style-type: none"> - Launched 'Fresh & Healthy' a customer health eating initiative for education sector (including walk-up nutrition kiosks and podcasts) </p>
<p>3. Sodexo (Paris, France)</p> <p>Annual Sales: (US) \$6,300 (million) *Worldwide the Group has annual revenues of (US) \$6.7 billion Major segments served: Healthcare (27%), College/University (25%), Business and Industry (23%), Number of contracts in North America: 5,900 Sustainability/Quality initiatives: <ul style="list-style-type: none"> - Zero trans fats in food products program - Endorsed the Global Sullivan Principles, the model corporate code of conduct developed by the late international civil rights leader Rev. Leon H. Sullivan, in which the company has agreed to support a variety of corporate responsibility initiatives related to human rights, equal opportunity, business ethics and protecting the environment. - Require certification that products are produced without cruelty to animals - Since 1996, have supported the National Fish and Wildlife Foundation (NFWF). </p>

The trade journal *Food Management* ranks the companies according to full top-line revenues. This includes vending, commercial services and other non-manual food service-related activities. Just over 10% of the sales of top ranking company Compass Group are in the University/College food service sector, compared with 14% of Aramark's and 25% of Sodexo's. However, Compass Group has increased their College/University contract

holdings by 11% since 2005. Sodexo's education segment grew by just over 5% in 2006, led primarily by college/university contracts (Buzalka, 2006). According to 2005 figures, the proportion of self-operated food services on campuses is decreasing, while contracted services are on the rise. In 2005, contracted food services business grew by 7.6% (Food Service Director, 2006).

Appendix Four: Fee Managed vs. Profit and Loss Food Services Contracts

Unlike most other contracted food services in Ontario, Queen's University Sodexho contract operates on a Fee management contract, rather than a Profit and Loss contract. Queen's University pays a fee to Sodexho for its management services, and remaining revenues and surpluses are then invested into facility and meal plan improvements⁴⁵. Bruce Griffiths and Phil Sparks both argued that this was the best possible model for food services that were contracted out as the host university still retained an enormous degree of control. They had the power to set hours of operation and the control many of the details of the meal place. In a Profit and Loss contract, more of the risk is borne by the contractor, rather than the university. The contractor pays a commission to the university for the account, and then all remaining profits or losses accrue to the contractor (Lawler, 2006). In this contract model, the contractor has far greater control over food services.

⁴⁵ Such as avocados or chocolate soymilk – items which were identified by Bruce Griffiths.

Appendix Five: Sample Product Testing Form

Product Testing, at Queens, February 26th, 2007									
	Beef	Chicken	Vegetable	Fish	Low Sodium	Beef	Chicken	Vegetable	Fish
<i>KNOX</i>									
Soup Bases, reg. & no msg									
Enviro friendly packaging									
Convenient for use									
Trans Fat									
Storage Dry, Fr. Refr.									
Country of prod.									
Flavour									
Smell									
Taste									
Colour									
Texture									
Holding cap.									
Financial:									
Yield per oz.									
cost per oz									
Listings:GFS national									
GFS national									
Comments:									
Score: 1 to 5 , 5 being the Best									

Appendix Six: University of Guelph Hospitality Services - Future Local and Sustainable Initiatives

- Increase purchase of local, seasonal and organic products (Summer 2007)
- Increase amount of environmentally friendly disposable wares (made from corn starch or sugar cane (Fall 2007)
- Seek additional source reduction opportunities through suppliers re: packaging (On going)
- Develop local farm to fork initiatives by working with Local Flavour Plus (Summer 2007)
- Increase purchases of GMO free food (Fall 2007)
- Purchase natural chemical free foods where possible (On going)
- Increase use of recycled fine paper in Print Shop (Fall 2007)
- Introduce a yearly Feast of the Fields promotion featuring locally grown fruits and vegetables (Fall 2007)
- During the Organic Conference in January highlight organic menus through an Organic Week promotion across campus (Winter 2008)
- Redesign menus to showcase local and sustainable products (Summer 2007)
- Increase the number of local and sustainable products through the Ontario and Canadian university co-op purchasing groups (On going)
- Introduce a hands free washing system for Hospitality Services employees (Spring 2007)
- Reduce trans fats in products sold by Hospitality Services (On going)
- Increase the amount of products that are purchased locally - Ontario (Summer 2007)
- Create a store on campus featuring natural, local and organic products (Fall 2007)
- Purchase free run whole fresh eggs as an alternative to cage reared eggs (Fall 2007)
- Increase the purchase of sustainable seafood products (Summer 2007)
- Contract directly with farms to grow local sustainable produce for Hospitality Services (Summer 2007)
- Serve seasonal dishes and local product in all dining halls (Fall 2007)
- Collect used books at the Bookstore to send to underprivileged countries ie. "Books for Africa" project (Fall 2007)
- Work with the Food Link Wellington County Buy Local organization to increase local products through their program Buy Local! Buy Fresh! (Summer 2007)
- Source products at the Elmira Product Auction Cooperative which is a live, public auction for top quality, fresh picked wholesale lots of seasonal fruit, vegetables and cut flowers (Spring 2007)
- As a good neighbour approach, include local farm names on products sold on campus whenever possible (Fall 2007)
- Develop a marketing campaign to educate customers to encourage use of local sustainable products (Fall 2007)

Appendix Seven: GREB Letter of approval

November 24, 2006



OFFICE OF RESEARCH SERVICES

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Julia Bryan
Graduate Student
Department of Geography
Queen's University

GREB Ref # GGEO-057-06

Title: "The Political Geographies of Food Service Provision at North American Universities"

Dear Ms. Bryan:

The General Research Ethics Board (GREB) has given expedited approval to your proposal entitled "The Political Geographies of Food Service Provision at North American Universities". In accordance with the Tri-Council Guidelines (article D.1.6) and Senate Terms of Reference (article G), your project has been approved for one year. At the end of each year, GREB will ask if your project has been completed and if not, what changes have occurred or will occur in the next year.

You are reminded of your obligation to advise the GREB, with a copy to your unit REB, of any adverse event(s) that occur during this approval period (details available on our webpage www.queensu.ca/vpr/greb/add/forms.html#Adverse). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that any adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be approved by the GREB. Examples of required approvals are: changes in study procedures or implementations of new aspects into the study procedures that affect human subjects. These changes must be sent to Linda Frid at the Office of Research Services or fridl@post.queensu.ca prior to implementation. Ms. Frid will seek the approval of the GREB reviewer(s) who originally assessed your application.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Alice Aiken".

Alice Aiken PT, PhD
School of Rehabilitation Therapy
and Member,
General Research Ethics Board

AA/lf

Joyce Davidson & Audrey Kobayashi, Co-Chairs Unit REB
Betsy Donald, Faculty Supervisor

think Research
think Queen's

PREPARING LEADERS AND CITIZENS FOR A GLOBAL SOCIETY

Appendix Eight: Letter of Information

Letter of Information: The Political Geographies of food service provision at North American Universities

This research project involves food policy decisions at Universities. The project will examine differences between university policies on food provision and services.

This research is conducted strictly for academic purposes, by Julia Bryan, master's degree at the Department of Geography, Queen's University, Kingston, Ontario.

You are being asked to participate because your knowledge of this topic would provide a useful and valuable perspective. The goal of this research is to gain a better understanding of how university policies and administrators impact food availability and services on campus. While there is no direct benefit to you for participating in this study, the goal of this research is to gain insight into which factors are most important in influencing food policy decisions. I will be pleased to provide you a copy of the resulting paper upon request.

I am asking you to help by consenting to an open-ended interview. These interviews will be designed to minimize the amount of time required, and will be conducted and scheduled to meet your time constraints. The length of the interview will be approximately 30 minutes, but can be shortened or lengthened upon request. The interviews will, with your permission, be recorded on audiocassette. There will be no remuneration provided for participation. There are no known physical, psychological, economic or social risks involved with participation in this research.

Should you desire, any and all information provided by you will be strictly confidential. Confidentiality will be assured through the provision of code numbers to each interviewee. Please remember, your participation in this study is strictly voluntary and I assure you that, should you desire, your identity will not be revealed in any presentation or publications that result from this research without your written consent. You are free to withdraw at any time, and you may decline to answer any question(s).

If you have any questions regarding the study and your participation in it, feel free to ask.

Julia Bryan, MA Candidate
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(613) – 546 – 5720, or jab8@qlink.queensu.ca

You may also contact my supervisor or the General Research Ethics Board
Dr. Betsy Donald, Assistant Professor, Queen's University
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Dr. Joan Stevenson, Professor and Chair of General Research Ethics Board
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Queen's University, Kingston, Ontario, Canada K7L 3N6

Appendix Nine: Timeline of Food Services on Queen's Campus

Timeline of Food Services on Queen's University Campus

1925	Ban Righ Hall and Gordon Dining Room Opened
1928	Orphan's Home purchased at corner of Union and University – became Student Memorial Union. Had all-male dining room.
1939	First Ban Righ Expansion
1947	Student Memorial Centre Burns and is rebuilt (which now includes Wallace Hall, a dining area for men)
1952	Adelaide Hall and second Ban Righ expansion with doubled dining capacity is opened.
1955	McNeill House, first all-male residence opens on campus
1958	Morris Hall Opens (all-male)
1959	Leonard Hall opens (all-male) with first common dining room for all male students (residents and non-residents)
1960	Women allowed into Student Memorial Centre, except for dining rooms
1966	Beaver begins contracted service of Leonard Hall Cafeteria
1968	Ban Righ Board approves Beaver Foods for management of their food services
1969	Ban Righ Dining Room renovated and renamed Levana Dining Room
1970s	All residence councils combine to become Inter Residence Council
1975	Saga Canadian Management Services contract between Company, Director of Residences and Director of Purchasing and Food Services – for: The Leonard Field Residences, The Women's Residences, The Student's Memorial Union, West Campus Social Centre, Mackintosh Corry Hall Cafeteria, the University Centre (under construction)
1979	All concession stands (exception: football games at Richardson Stadium) are included for the first time in the Saga contract
1986	Marriott acquires Saga Foods
1998	Sodexo USA merges with Marriott to become Sodexo-Marriott.

Bibliography

Archival Documents

- Queen's University Archives. Office of the Dean of Women Fonds. 1907-1986. Location #: 3739.1. Series: Women's Residence Council Minutes. Box 1. Folder 14.
- Queen's University Archives. Office of the Director of Residences Fonds. 1964-1992. Location #5119. Series: Leonard Field Residence Council Minutes and Residence Handbooks Box: 2 and 13.
- Queen's University Alumnae Association Fonds. 1889-1992 Location #: 3627
- Queen's University Archives. University Secretariat Fonds. Series: Ban Righ Hall Renovation Project. Box 2. Files 4 and 5.
- Queen's University Archives. University Secretariat Fonds. Series: Contracts: McRae, Saga, Brown's Fine Foods and Beaver Foods. Third Floor.

Books and Book Chapters

- Bowler, I. 1992. *The Geography of Agriculture in Developed Market Economies*. New York: Longman Scientific & Technical.
- Bradford, M. and E. Stratford. 2000. Qualitative Research Design and Rigour. In *Qualitative Methods and Human Geography*. Hay, I, 37-49 Oxford: Oxford University Press.
- Bronwell, K. and K. Horgen. 2004. Food Fight: The Inside Story of the Food Industry. America's Obesity Crisis & What We Can Do About It. New York: McGraw-Hill Companies.
- Buttel, F. 1997. Some Observations on Agro-food change and the future of Agricultural Sustainability Movements, In *Globalising Food: Agrarian Questions and Global Restructuring*, ed D. Goodman and M.J. Watts, pp. 355-365. London: Routledge.
- Castree, N. and B. Braun. 2001. Social Nature: Theory, Practice and Politics. Oxford: Blackwell Publishing Ltd.

- Chisholm, A. H. and R. Tyers. 1982. Food security: An introduction and overview in H. Chisholm and R. Tyers (eds.), *Food Security: Theory, Policy, and Perspectives from Asia and the Pacific Rim*. Lexington, MA: Lexington Books.
- Clugston, R. and W. Calder. 1999. Critical Dimensions of sustainability in higher education. In WL Filho (Ed) *Sustainability and university life*. Frankfurt am Main, Germany: Peter Lang.
- Creighton, S. 1998. *Greening the Ivory Tower: Improving the Environmental Track Record of Universities, Colleges, and Other Institutions*. Cambridge, MIT Press.
- Filho, W.L. 1999. *Sustainability and University Life*. Frankfurt am Main, Germany: Peter Lang GmbH.
- Fine, B. 1996. *Consumption in the Age of Affluence: The World of Food*. London: Routledge.
- Fine, B. 1998. *The Political Economy of Diet, Health and Food Policy*. London: Routledge.
- Friedland, W. 1984. Commodity systems analysis: an approach to the sociology of agriculture. In *Research in rural sociology of agriculture*, ed Schwazweller, H. 221-235. Greenwich, CT: JAI Press.
- Friedland, W., A. Barton and R. Thomas. 1981. *Manufacturing Green Gold: Capital, Labour and Technology in the Lettuce Industry*. Cambridge: Cambridge University Press.
- Hakim, C. 2000. *Research Design: Successful designs for Social Science and Economic Research*. London: Routledge.
- Kearns, R. 2005. Knowing seeing? Undertaking observational research. In *Qualitative research methods in Human Geography*, ed. I. Hay. 192-206. Oxford: Oxford University Press.
- Maye, D., L. Holloway and M. Kneafsey. (eds.). 2007. *Alternative Food Geographies: Representation and Practice*, Oxford: Elsevier Press, pp. 273-288.
- Koc M., R. MacRae, L. Mougeot, and J. Walsh. 1999. *for Hunger-Proof Cities: Sustainable Urban Food Systems*. Ottawa: IDRC.
- Koc, M. 2005. *Food Banking for Community Food Security? Paper presented at the Annual General Meeting of the Canadian Association of Food Banks*, Toronto.
- Leyshon, A, R.. Lee and C. Williams. 2007. *Alternative Economic Spaces*. London: Sage Publications.
- McRae, R. 1999b. Policy Failure in the Canadian Food System. pp. 182-194 in Koc, M et al (eds.) *for Hunger-Proof Cites: Sustainable Urban Food Systems*. Ottawa: IDRC.

- M'Gonigle, M. and J. Starke. 2006. Planet U, sustaining the world, reinventing the university. Canada: New Society Publishers.
- Murdoch, J. 2006. Post-Structuralism and Relational Space. London: Sage Publications.
- Neumann, R. 2005. Making Political Ecology. London: Oxford University Press.
- Orr, D. 1994. Earth in Mind. Washington: Island Press.
- Robbins, P. 2004. Political Ecology: A Critical Introduction. Malden, MA: Blackwell.
- Spence, W. 1994. Innovation: the communication of change in ideas, practices and products. 1st Ed. London: Chapman & Hall.
- Tansey, G. and T. Worsley. 1995. The Food System: A Guide.. London: Earthscan.
- World Bank. 1986. Poverty and Hunger: Issues and Options for Food Security in Developing Countries. Washington DC.
- Yin, 1994. Case study Research Design and Methods. 2d ed. Thousand Oaks, California: Sage.

Conference Presentations and Papers

- Morgan, K. 2007. Critical Spaces of Food Conference. Queen's University, Kingston, ON, February.
- Hoorweg, D. 2007. 'Cities and Climate Change.' CHEMRAWN-XVII and ICCDU-IX Conference on Greenhouse Gases: Mitigation and Utilization, 8-12 July 2007. Queen's University, Kingston, ON.
- Pritchard, B. 2000. The tangible and intangible spaces of agro-food capital: *Paper presented at the International Rural Sociology Association World Congress X, Rio de Janeiro, Brazil* < <http://www.geosci.usyd.edu.au/users/pritchard/agrifood/rio%20paper.pdf>> [Accessed: 29 October 2005].
- Pollan, M. 2006. Beyond the Bar Code: The Local Food Revolution. Talk given at Bioneers 2006 Conference. <http://www.bioneers.org/pollan> Accessed June 27, 2007.

Journal Articles

- Acs, Z and K. Stanton. 2005. The Infrastructure of Obesity and the Obesity Epidemic: Implications for Public Policy. *Applied Health Economics & Health Policy*. 4(3):139-146.
- Arce, A. and Marsden, T. 1993. The social construction of international food: a research agenda: *Economic Geography* 69 293-311.
- Allen, P. and J. Guthman. 2006. From “old school” to “farm-to-school” : Neoliberalism from the ground up. *Agriculture and Human Values*. 23: 401-415
- Allen, P., M. FitzSimmons, M Goodman, and K. Warner. 2003. Shifting plates in the agri-food landscape: the tectonics of alternative food initiatives in California: *Journal of Rural Studies* 19: 61-75.
- Allison, E. and F. Ellis. 2001. The livelihoods approach and management of small-scale fisheries Marine Policy. *Marine Policy*. (25)5: 377-388.
- Anderson, M. and J. Cook. 1999. Community Food Security: Practice in need of theory?: *Agriculture and Human Values* 16: 141-150.
- Bakker, J. 2000. Privatizing Water, Producing Scarcity: The Yorkshire Drought of 1995. *Economic Geography*. 76(1): 4-27.
- Baum, J., J. Painter and A. Watgen. 2003. Predicted versus actual nutrient consumption in the diet of university students. *Foodservice Research International*. 14: 115-124.
- Beck, T. 1995. The green revolution and poverty in India: A case study of West Benegal. *Applied Geography* 15(2): 161-181.
- Betts, N.M., R.J. Amos, K. Keim, and P. Peters. 1997. Ways young adults view foods. *Journal of Nutritional Education*. 29: 72-79.
- Blay-Palmer, A. and B. Donald. 2006a. A tale of three tomatoes: the new city food economy in Toronto, Canada. *Economic Geography* 82 (4): 383-399.
- Buttel, F. 2001. Some Reflections on Late Twentieth Century Agrarian Political Economy. *Sociologia Ruralis*. 41(2): 165-181.
- Bondi, L. 1997. In Whose Words? On Gender Identity, Knowledge and Writing Practice. *Transactions of the Institution of British Geographers*. 22(2): 245-258.
- Bourn, B. and M. Purcell. 2006. Avoiding the local trap. *Journal of Planning Education and Research*. 26: 195-207.

- Campbell, M. 2004. Building a Common Table: The role for planning in Community Food System. *Journal of Planning Education and Research*. 23: 341-355.
- Castree, N. 1999. "Out there?" "In here?" Domesticating critical geography. *Area* 31(1), 81-6.
- Cheadle A et al. . 1991. Community-level comparisons between the grocery store environment and individual dietary practices. *Preventative Medicine*. 1991 Mar; 20(2):250-61.
- Cheadle, A., B. Psaty S. Curry, E. Wagner, P. Diehr, T. Koepsell, and A. Kristal.. 1993. Can measures of the grocery store environment be used to track community-level dietary changes? *Preventative Medicine*. May; 22(3):361-72.
- Cummins, S. and S. Macintyre. 2002. Food Deserts – evidence and assumption in health policy making. *British Medical Journal*. vol. 325: 436-438.
- Clarke, J. 2005. The 'New Associationalism' in agriculture: agro-food diversification and multifunctional production logics: *Journal of Economic Geography* 5(4):475-498.
- Cortese, A. 2003. The Critical Role of Higher Education in Creating a Sustainable Future. *Planning for Higher Education*. March-May: 15-22.
- Crewe, L. 2001: The besieged body: geographies of retailing and consumption. *Progress in Human Geography* 25: 629–40.
- Dixon, J. 1999. A Cultural Economy Model for studying food systems: *Agriculture and Human Values* 16: 151-160.
- Dorling, D. and Shaw, M. 2002: Geographies of the agenda: public policy, the discipline and its (re)'turns'. *Progress in Human Geography*. 26. 611–28.
- Donald, B. and A. Blay-Palmer. 2006. The urban creative-food economy: producing food for the urban elite or social inclusion opportunity? *Environment and Planning A* 38: 1901-1920..
- Edwards, J., K. Engström and H. Hartwell. 2005. Overweight, Obesity and the food service industry. *Food Service Technology*. 5: 85-94.
- Dowling, R. (2000). Power, Subjectivity and Ethics in Qualitative Research, in Hay, I. (Ed) *Qualitative Research Methods in Human Geography I*, pp 23-36. Oxford: Oxford University Press.
- Fine, B. 2004. Debating Production-Consumption Linkages in Food Studies. *Sociologia Ruralis* 44(3): 332-342.
- Friedland, W. 2001. Reprise on Commodity Systems Analysis. *The International Journal of Sociology and Food*. 9: 82-103.

- Friedland, W. 1984. Commodity systems analysis: An approach to the Sociology of Agriculture. *Research in Rural Sociology*. 1: 221-235.
- Friedmann, H. 2007. "Scaling up: Bringing public institutions and food service corporations into the project for a local, sustainable food system in Ontario." *Agriculture and Human Values*. 24 (3): 389-398
- Friedmann, H. .1993. The political economy of food: a global crisis. *New Left Review*. 197: 29–57.
- Forster J. and K. Klepp. 1985. The Norwegian Nutrition and Food Policy: An Integrated Policy Approach to a Public Health Problem. *Journal of Public Health Policy*. 6(4): 447-463.
- Gertler, M. 2001. Best Practice? Geography, learning and the institutional limits to strong convergence. *Journal of Economic Geography*. 1(5): 5-26.
- Gertler, M, Wolfe, D and D. Garkut. 2000. No place like home? The embeddedness of innovation in a regional economy. *Review of International Political Economy*. 7(4): 688-718.
- Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *The American Journal of Sociology*. 91(3): 481 - 510.
- Greenberg, J. and T. Park. 1994. Political Ecology. *Journal of Political Ecology*. 1: 1-12.
- Goodman, D. 1999. Agro-food Studies in the 'Age of Ecology'" Nature, Corporeality, and Bio-Politics. *Sociologia Ruralis*. 39(1):17-38.
- . 2003. The quality 'turn' and alternative food practices: reflections and agenda: *Journal of Rural Studies* 19(1): 1-7.
- . 2004. Rural Europe redux? "Reflections on alternative agro-food networks and paradigm change: *Sociologia Ruralis* 44: 3-16.
- Goodman, D and E. M. DuPuis. 2002. Knowing Food and Growing Food: Beyond the Production-Consumption Debate in the Sociology of Agriculture: *Sociologia Ruralis* 42(4) 5-22.
- Guthman, J. 2004. The Trouble with Organic Lite in California: a Rejoinder to the 'Conventionalism' debate: *Sociologia Ruralis* 44(3): 301-316.
- Hamm, M. and Bellows, A. 2003. Community Food Security and Nutrition Educators. *Journal of Nutrition Education*, Vol. 35 (1): p. 37-43.
- Heron, L. 2006. Towards governing spaces sustainably – reflections in the context of Auckland, New Zealand. *Geoforum*. 37: 441-446.

- Hinrichs, C. 2000. Embeddedness and local food systems: notes on two types of direct agricultural market: *Journal of Rural Studies* 16(3): 295-303.
- . 2003. The practice and politics of food system localization: *Journal of Rural Studies* 19(1): 33-45.
- Hendrickson, M and W. Heffernan. 2002. Opening Spaces through Relocalisation: Locating the Potential Resistance in the Weaknesses of the Global Food System: *Sociologia Ruralis* 42(4): 347-369.
- Horrigan, L., R. Lawrence and P. Walker. 2002. How Sustainable Agriculture Can Address the Environmental and Human Health: Harms of Industrial Agriculture. *Environmental Health Perspectives*. 110(5): 445-456.
- Ilbery, B. and M. Kneafsey. 2000. Producer constructions of quality in regional speciality food production: a case study from southwest England. *Journal of Rural Studies*. 16: 217-230.
- Kaufman, J. 2004. Introduction. *Journal of Planning Education and Research*. 23: 335-340.
- Keil, R. 2003. Urban Political Ecology. *Urban Geography*. 24(8): 723-738.
- Kitay, J. and R. Callus. 1998. The Role and Challenge of Case Study Design in Industrial Relations Research, in Whitfield, K and Strauss, G. (Eds) *Researching the World of Work: Strategies and Methods in studying industrial relations*. Ithica: Cornell University Press. pp: 101-112.
- Kitchin, R. and P. Hubbard. 1999. Research, action and 'critical' geographies. *Area*. 31(3): 195-198.
- Kloppenburg, J., G. Stevenson and J. Hendrickson. 1996. Coming into the Foodshed: *Agriculture and Human Values*. 13(3): 33-42.
- Kloppenburg, J., S. Lezerg, K. De Master, G. Stevenson and J. Hendrickson. 2000. Tasting food, tasting sustainability: defining attributes of an alternative food system with competent ordinary people: *Human Organization*. 59(2): 177-185.
- Lang T., D. Barling and M. Caraher. 2001. Food, Social Policy and the Environment: Towards a new model. *Social Policy and Administration*. 35(3):538-558.
- Lang, T. and M. Heasman. 2004. Diet and Nutrition: A clash of ideas or Investment. *Development* 47(2).
- Levitsky, D.A., C.A. Halbmaier, and G. Mrdjenovic. 2004. The freshman weight gain: a model for the study of the epidemic of obesity. *Journal of Obesity*. 28(11): 1435-1442.
- Lockie, S. 2002. 'The Invisible Mouth': Mobilizing 'the Consumer' in Food Production-Consumption Networks: *Sociologia Ruralis* 42(4) 278-294.

- Lockie, S. and S. Kitto. 2000. Beyond the Farm Gate: Production-Consumption Networks and Agri-Food Research. *Sociologia Ruralis*. 40(1): 3-19.
- Lorzano, R. 2006. Incorporation and institutionalization of SD into universities: breaking through barriers to change. *Journal of Cleaner Production*. 14:787-796.
- Lukman, R. and P. Glavic. 2007. What are the key elements of a sustainable university? *Clean Technologies and Environmental Policy*. 9(2): 103-114.
- Martin, R.L. 2001. Geography and public policy: the case of the missing agenda. *Progress in Human Geography*. 25: 189-210.
- Massey, D. 2001: Geography on the agenda.. *Progress in Human Geography*. 25: 5-17.
- McArthur L., F. Grady, R. Rosenberg and A.. Howard. 2000. Knowledge of college students regarding three themes related to dietary recommendations. *American Journal of Health Studies*. 16: 177-185.
- McGeer, Allison. 1998. Agricultural antibiotics and resistance in human pathogens: Villain or scapegoat? *Canadian Medical Association Journal*. 159 (9)19-20.
- McMahon, M. 2002. Resisting Globalization: Women organic farmers and local food systems. *Canadian Woman Studies*. 21(3): 203-206.
- McRae, R. 1999a. Not just what, but how: Creating agricultural sustainability and food security by changing Canada's agricultural policymaking process. *Agriculture and Human Values* 16: 187-201.
- Marsden, T. 2000. Food Matters and the Matter of food: Towards a New Food Governance?: *Sociologia Ruralis* 40: 20-29.
- Marsden, T., J. Banks, and G. Bristow. 2000. Food Supply Chain Approaches: Exploring their Role in Rural Development: *Sociologia Ruralis* 40:424-38.
- Maxwell, S. 1996. Food Security: A post-modern perspective: *Food Policy* 21(2): 155-170.
- Morgan, K and J Murdoch. 2000. Organic vs. Conventional Agriculture: Knowledge, power and innovation in the food chain: *Geoforum* 31: 159-173.
- Morgan, K. 2006. "School Food and the Public Domain: The Politics of the Public Plate." *The Political Quarterly*. 77(3): 379-387.
- Morgan, K. 2007. "Greening the Realm: sustainable food chains and the public plate." *The Regeneration Institute*, Cardiff University, Cardiff.
- Moore, J. 2005. Policy, Priorities and Action: A Case study of the University of

- British Columbia's Engagement with Sustainability. *Higher Education Policy*. 18: 179-197.
- Moore, J. 2005. Seven Recommendations for creating sustainability education at the university level: A guide for change agents. *International Journal of Sustainability in Higher Education*. 6(4): 326-339.
- Morris, C. and N. Evans. 2004. Agricultural turns, geographical turns: retrospect and prospect.. *Journal of Rural Studies*. 20(1): 95-111.
- Murdoch, J. 1997. Inhuman/Nonhuman/Human: Actor-Network Theory and the Prospects for a Nondualistic and Symmetrical Perspective on Nature and Society. *Environment and Planning D: Society and Space*. 15:731-56.
- Murdoch, J. 1998. The Spaces of Actor-Network Theory. *Geoforum* 29:357-74.
- Murdoch, J. and M. Miele. 1999. Back to Nature: Changing 'Worlds of Production' in the food sector: *Sociologia Ruralis* 39(4): 465-483.
- Nanda, M. 1995. Transnationalisation of the Third World State and Undoing of the Green Revolution: *Economic and Political Weekly* January 28: 20-30.
- Nestle, M. 2002. Food Politics: How the food industry influences health and nutrition. Berkeley: University of California Press.
- Nichol, L. 2003. Local Food Production: Some implications for planning. *Planning Theory and Practice*. 4(4): 409-427.
- Nollet, J and M. Beaulieu. 2005. Should an Organisation join a purchasing group? *Supply Chain Management: An international Journal*. 10(1): 11-17.
- Pothukuchi, K. 2004. Community Food Assessment: A First Step in Planning for Community Food Security. *Journal of Planning Education and Research*. 23: 356-377.
- Raynold, S and Laura T. 2002. Consumer/Producer Links in Fair Trade Coffee Networks: *Sociologia Ruralis* 42(4): 404-424.
- Raynolds, L. 2000. Re-embedding global agriculture: The international organic and fair trade movements. *Agriculture and Human Values*. 17: 297 – 309.
- Redclift, M. 2005. Sustainable Development (1987-2005): An Oxymoron Comes of Age. *Sustainable Development*. 13: 212-227.
- Renting, H., Marsden, T. and Banks, J. 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development: *Environment and Planning A* 35(3): 393-411.
- Riches, G. 1999. Advancing the human right to food in Canada: Social policy and the

- politics of hunger, welfare, and food security. *Agriculture and Human Values*. 16: 203–211.
- Riches, G. 2002. Food Banks and Food Security: Welfare Reform, Human Rights and Social Policy. Lessons from Canada? *Social Policy and Administration*. 36(6): 648-663.
- Rimington, M. et al. 2006. Corporate Social Responsibility and sustainable food procurement. *British Food Journal*. 180(10): 824-837.
- Roe, E. 2006. Things Becoming Food and the Embodied, Material Practices of an Organic Food Consumer. *Sociologia Ruralis*. 46(2): 104-121.
- Rydin, Y. 1998. The Enabling Local State and Urban Development: Resources, Rhetoric and Planning in East London. *Urban Studies*. 35(2): 175 – 19.
- Sage, C. 2003. Social Embeddedness and relations of regard: alternative ‘good food’ networks in southwest Ireland. *Journal of Rural Studies*. 19:47-60.
- Sayer, A. 2004. *Moral Economy*. <<http://www.lancs.ac.uk/fss/sociology/staff/sayer.htm>> [Accessed 27 March 2007].
- Schoeberger, E. 1991. The Corporate Interview as a Research Method in Economic geography. *Professional Geographer*, 43(2): 180-189.
- Sidaway, J. 1997. The production of British geography. *Transactions of the Institute of British Geographers* 22: 488-50.
- Uhl, Christopher and Amy Anderson. 2001. Green Destiny: Universities Leading the way to a sustainable future. *BioScience*. 51(1) 36-42.
- Valliantos, M., R. Gottlieb and M. Haase. 2004. Farm-to-school: Strategies for Urban Health, Combating Sprawl and Establishing a Community Food Systems Approach. *Journal of Planning Education and Research*. 23: 414-423.
- Wakefield, S. 2007. Reflective Action in the Academy: Exploring Praxis in Critical Geography using a “Food Movement” Case Study. *Antipode*. 39(2): 331-354.
- Watts, D., B. Ilbery and D. Maye. 2005. Making reconnections in agro-food geography: alternative systems of food provision: *Progress in Human Geography* 29(1): 22-40.
- Whatmore et al. 2003. What is so alternative about alternative food systems? *Environment and Planning A* 35: 389-391.
- Winter, M. 2003a. Geographies of food: Agro-food geographies – making Reconnections: *Progress in Human Geography* 27(4): 505-513.
- 2003b. Embeddedness, the new food economy and defensive localism: *Journal of Rural Studies* 19(1): 23–32.

- Wrigley, N., N. Coe and A. Currah. 2005. "Globalizing retail: conceptualizing the distribution-based transnational corporation (TNC)." *Progress in Human Geography*. 29(4): 437-457.
- Wrigley, N. and N. Coe. 2007. "Host economy impacts of transnational retail: the research agenda." *Journal of Economic Geography*. 7: 341-371.
- Wrigley, N. and M. Lowe. 2007. "Introduction: Transnational retail and the global economy." *Journal of Economic Geography*.(4):337-340.
- Yeung, H. 2003. Practicing New Economic Geographies: A Methodological Examination. *Annals of the Association of American Geographers*. 93(2): 442-462.
- Young, L. and M. Nestle. 2002. The contribution of Expanding Portion Sizes to the US obesity Epidemic. *American Journal of Public Health*. 92(2): 246-249.

Newspaper Articles, Magazine Articles, and Newsletters

- Buzalka, M. 2004. FM's 2004 Management Company TOP 50. *Food Management Online*. April 2004. <<http://www.food-management.com/article/532>> [Accessed: 23 November 2006].
- Buzalka, M. 2005. FM's 2005 Management Company TOP 50. *Food Management Online*. April 2005. <<http://www.food-management.com/article/9396>> [Accessed: 23 November 2006].
- Buzalka, M. 2006. FM's 2006 Management Company TOP 50. *Food Management Online*. April 2006.<<http://www.food-management.com/article/14554>> [Accessed: 23 November 2006].
- Campos, F and C Lei. 2006. Summers Doubles Green Campus Funds. The Harvard Crimson. Online Edition. April 28. <<http://www.thecrimson.com/article.aspx?ref=5>> [Accessed: 22 February 2007].
- Dharmarajah, T. 2007. Canada: Coca-Cola Booted from the University of Guelph. Guelph Mercury. <http://www.polarisinstitute.org/coca_cola_booted_from_the_university_of_guelph> [Accessed: 22 July 2007].
- Fusaro, D. 2005 Top 100 for 2005: This chicken comes first. Food Processing. <<http://www.foodprocessing.com/articles/2005/474.html>>[Accessed: 1 September 2007].
- FM Staff. 2006. Princeton Survey Says Bowdoin's got the best campus foodservice. *Food Management*. <<http://www.food-management.com/article/14939>> [Accessed: 28 November 2006].

FM Staff. 2006. The Freshman 15 is Shedding Pounds. *Food Management Online*. April 2006. <<http://www.food-management.com/article/11983>> [Accessed: 23 November 2006].

Harvard Green Campus Initiative Newsletter. 2007. HUDS Green Skillet. Spring vol.. 10.

Lawn, J. 2005. Going Green. *Food Management Online*. June 2005. <<http://www.food-management.com/article/8731>> [Accessed: 28 November 2006].

Manning, R. 2004. The Oil We Eat: Following the Food Chain Back to Iraq. *Harper's*. February. <<http://www.harpers.org/archive/2004/02/0079915>> [Accessed 22 April 2007].

Stith, P et al. 1995. Corporate takeovers. The Pulitzer Prize Winner 1996, The News and Observer. <http://www.pulitzer.org/year/1996/public-service/works/2big.html>.

Unpublished Thesis

Lam S. 2007. Urban Agriculture in Kingston: Present and Future Potential for Re-localization and Sustainability. Masters Thesis. Queen's University.

Lorzano, R. 2003. Sustainable Development in higher education. Incorporation, assessment and reporting of sustainable development in higher education institutions. Masters Thesis, IIIIEE, Lund University.

Shriberg, M. 2002. Development of a Sustainability Management Framework for the University of Michigan Housing Division. Masters Thesis, University of Michigan.

Other

Association of Universities and Colleges Canada. 2007. Research and statistics -Quick facts. <http://www.aucc.ca/publications/research/quick_facts_e.html> [Accessed: 27 June 2007].

Buttriss, J. 2004. Key points from the findings of volume 4 of the National Diet and Nutrition Survey (NDNS) of adults aged 19–64 years. *British Nutrition Foundation – Nutrition Bulletin*. 29(3): 249-253.

FAO (Food and Agriculture Organization of the United Nations). 1996. Sixth World Food Survey. Rome: Food and Agriculture Organization.

Future of Food, DVD. 2004. Directed by D. Koons Garcia. Mill Valley, CA: Lily Films.

Guelph Hospitality Services Local Sustainability Plan. 2007. <<http://www.hospitality.uoguelph.ca>>

- .ca/assets/uploads/HospitalitySustainabilityInitiatives.pdf> [Accessed 8 October 2007].
- Heart and Stroke Foundation. 2004. Annual Report Card on Canadians' Health. <<http://ww2.heartandstroke.ca/Page.asp?PageID=33&ArticleID=2> 916&Src=news&From=SubCategory> [Accessed: 5 September 2007].
- ILO Fact Sheet (2003) "Intensive Livestock Operations: An Introduction". Sierra Club of Canada. <http://www.sierraclub.ca/national/programs/health-environment/food-agriculture/ilo-introduction.shtml>. [Accessed: 19 February 2006].
- Kellman, J. and E. Guarino. 2000. International Food Laws. Norwich, Stationery Office.
- Martz, D. 2004. The Farmer's Share: Compare the Share 2004. Centre for Rural Studies and Enrichment. Prepared for the National Farmer's Union. <<http://nfu.ca/reading/CTSFINAL%202004.pdf>> [Accessed: 5 September 2007].
- Murray, B. 2007a. Anheuser-Busch Companies, Inc. (Hoover's Company Records) <<http://www.proquest.com/>> [Accessed 28 August 2007].
- Murray, B. 2007b. Kraft Foods Inc. 2007. (Hoover's Company Records) <<http://www.proquest.com/>> [Accessed 28 August 2007].
- Murray, B. 2007c. Nestle, Inc. 2007. (Hoover's Company Records) <<http://www.proquest.com/>> [Accessed 28 August 2007].
- Murray, B. 2007d. PepsiCo, Inc. 2007. (Hoover's Company Records) <<http://www.proquest.com/>> [Accessed 28 August 2007].
- Murray, B. 2007e. Tyson Foods, Inc. 2007. (Hoover's Company Records) <<http://www.proquest.com/>> [Accessed 28 August 2007].
- Northern Iowa University Food Project. 2007. <<http://www.uni.edu/ceee/foodproject/hist.htm>> [Accessed: 27 June 2007].
- Sayer, A. 2007. Personal website <<http://www.lancs.ac.uk/fass/sociology/profiles/16/>> [Accessed: 4 September 2007].
- Schlegel, K. 2007 Increasing Montana Institutions' Local Purchasing Power. *New West Living Online*. <http://www.newwest.net/index.php/topic/article/increasing_institutions_local_purchasing_power_with_montana_senate_bill_328/C520/L40/> [Accessed 21 June 2007].
- Statistics Canada. 2006. Childhood Obesity: A troubling situation. <http://www41.statcan.ca/2966/ceb2966_004_e.htm> [Accessed 17 April 2007].
- Toronto Food Policy Council. 1994. Health, wealth and the environment: the

impacts of the CUSTA, GATT and NAFTA on Canadian food security. TFPC, Toronto, ON, Canada. TFPC Paper No. 2.

United Nations (1996). International Covenant on Economic, Social and Cultural Rights. General Assembly Resolution 2200A (XXI), 16 December. <http://www.unhchr.ch/html/menu3/b/a_ceschr.htm> [Accessed: 22 November 2007].

University of Northern Iowa Local Food Project. 2007. [http://www.uni.edu/ceee/food project/](http://www.uni.edu/ceee/foodproject/)> [Accessed: 8 September 2007].

Matheson, N. 2006. Unlocking the Food Buying Potential of Montana's Public Institutions. 2006. <<http://growmontana.ncat.org/unlocking.php>> [Accessed: 21 June 2007].

World Commission on Environment and Development (WCED). 1987. Our Common Future, Oxford: Oxford University Press.

Yale Sustainable Food Project. 2007. Overview. <<http://www.yale.edu/sustainablefood/overview.html>> [Accessed: 27 June 2007].